



STIC Search Report

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STIC Database Tracking Number: 94499

TO: Jon Epperson

Location:

Art Unit: 1639

June 9, 2003

Case Serial Number: 743746

From: P. Sheppard

Location: CM1-1E03

Phone: (703) 308-4499

sheppard@uspto.gov

Search Notes

Access DB# 94486

RECEIVED SEARCH REQUEST FORM

MAY 20 Scientific and Technical Information Center

Requester's Full Name: Jon Epperson Examiner #: 7431 Date: 5/20/03
Art Unit: 1639 Phone Number 308-2423 Serial Number: 091743748
Mail Box and Bldg/Room Location: CMI-3801 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Anytstone linkers for mass spectrometric analysis
Inventors (please provide full names): Gunter Schmidt et al

Earliest Priority Filing Date: 7/11/1999

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

PLEASE do a "structure search"
on the compounds listed in claims
135-39 (see attached sheet)

Thanks for your help!

-Jon

STAFF USE ONLY

	Type of Search	Vendors and cost where applicable
Searcher: <u>Shepperson</u>	NA Sequence (#) _____	STN _____
Searcher Phone #: _____	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) _____	Questel/Orbit _____
Date Searcher Picked Up: _____	Bibliographic _____	Dr.Link _____
Date Completed: <u>6/9/03</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: _____	Fulltext _____	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: _____	Other _____	Other (specify) _____

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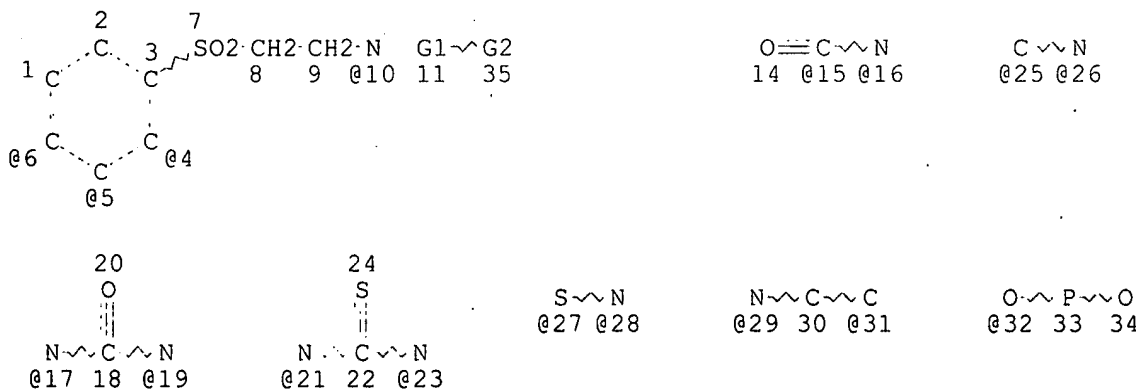
FILE COVERS 1907 - 9 Jun 2003 VOL 138 ISS 24
 FILE LAST UPDATED: 8 Jun 2003 (20030608/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L3 STR



VAR G1=15/16/17/19/21/23/25/26/27/28/29/31/32

VAR G2=4/5/6/10

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

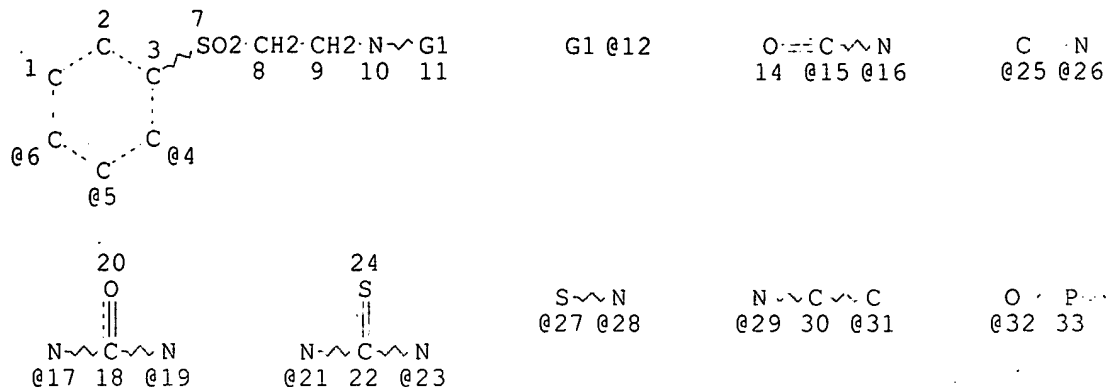
RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 33

STEREO ATTRIBUTES: NONE

L4 (293)SEA FILE=REGISTRY SSS FUL L3

L5 STR



VAR G1=15/16/17/19/21/23/25/26/27/28/29/31/32

VPA 12-4/5/6 U

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 33

STEREO ATTRIBUTES: NONE

L6 (4)SEA FILE=REGISTRY SUB=L4 SSS FUL L5
 L7 289 SEA FILE=REGISTRY ABB=ON PLU=ON L4 NOT L6
 L8 91 SEA FILE=HCAPLUS ABB=ON PLU=ON L7
 L9 1 SEA FILE=REGISTRY ABB=ON PLU=ON OLIGOETHER/BI
 L10 168 SEA FILE=REGISTRY ABB=ON PLU=ON POLYETHER/BI OR POLYETHERS/BI
 L11 1273885 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 OR L10 OR ?ETHER?
 L12 12 SEA FILE=HCAPLUS ABB=ON PLU=ON L11 AND L8

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L12 ANSWER 1 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2003:1186 HCAPLUS

DOCUMENT NUMBER: 138:57470

TITLE: Manufacture of azo compounds for black-dyeing inks

INVENTOR(S): Lehmann, Urs; Tzikas, Althanassios; Frick, Marcel

PATENT ASSIGNEE(S): Ciba Specialty Chemicals Corporation, USA

SOURCE: U.S., 37 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6500247	B1	20021231	US 2000-495803	20000201
US 2003024435	A1	20030206	US 2002-60833	20020129
PRIORITY APPLN. INFO.:			EP 1999-810098	A 19990205
			US 2000-495803	A3 20000201

OTHER SOURCE(S): MARPAT 138:57470

GI.

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Black-dyeing aq. inks having good black shades without a shade change in artificial light and outstanding lightfastness comprise 20-95% of at least one dye (A), together with 5-80% of at least one dye chosen from the group consisting of (B) and (C), and 1-40% of a water-miscible org. solvent, based on the total wt. of the ink, where the dye (A) contains, as the coloring part of the mol., one or more radicals of the formula I, II, III or IV, the dye (B) contains, as the coloring part of the mol., one or more mono- or disazo radicals contg. sulfo groups or one or more radicals of the formula V, VI, or VII and the dye (C) contains, as the coloring part of the mol., one or more mono- or disazo radicals contg. sulfo groups or one or more radicals of the formulas V, VI, or VII and one or more radicals of the formulas I, II, III or IV (G = amino, OH, nitro groups; L = H or amino groups; R = halogen, C1-4 alkyl, alkoxy, C2-4 alkoxyamino, OH, COOH, nitro, CN; V = halogen, C1-4 alkyl, alkoxy, .beta.-sulfoethylsulfonyl, sulfo groups; W = N-acyl radical; n = 0, 1-3; m = 1-3; r, q = 0, 1).

IT 479548-95-3P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(dye compds.; manuf. of azo compds. for black-dyeing inks)

REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:783925 HCAPLUS

DOCUMENT NUMBER: 132:22753

TITLE: Preparation of N-(arylsulfonylphenyl)-2-hydroxy-2-methyl-3,3,3-trifluoropropanamide derivatives for the elevation of pyruvate dehydrogenase (PDH) activity

INVENTOR(S): Butlin, Roger John; Nowak, Thorsten; Burrows, Jeremy Nicholas; Block, Michael Howard

PATENT ASSIGNEE(S): Zeneca Limited, UK

SOURCE: PCT Int. Appl., 211 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

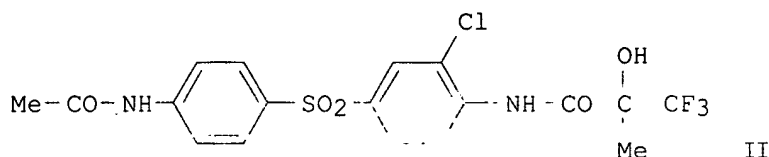
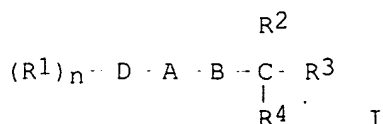
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9962506	A1	19991209	WO 1999-GB1669	19990526
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
CA 2331685	AA	19991209	CA 1999-2331685	19990526
AU 9940524	A1	19991220	AU 1999-40524	19990526
AU 740909	B2	20011115		
BR 9910821	A	20010213	BR 1999-10821	19990526
EP 1082110	A1	20010314	EP 1999-923767	19990526
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
EE 200000691	A	20020415	EE 2000-691	19990526

JP 2002516854 T2 20020611 JP 2000-551762 19990526
 NZ 507784 A 20021025 NZ 1999-507784 19990526
 US 6498275 B1 20021224 US 2000-700370 20001115
 NO 200006010 A 20010126 NO 2000-6010 20001128
 PRIORITY APPLN. INFO.: GB 1998-11427 A 19980529
 WO 1999-GB1669 W 19990526
 OTHER SOURCE(S): MARPAT 132:22753
 GI



AB Aryl Ph sulfone and sulfoxide derivs. (I) [where ring D = (un)substituted Ph, pyridyl, pyrazinyl, pyrimidinyl, pyridazinyl, or other 6-membered N-contg. heteroaryl ring; R¹ = (hetero)arylsulfonyl, (hetero)arylsulfinyl, (hetero)arylcarbonyl, (halo)alkyl, (halo)alkoxy, alkenyloxy, cyano, NO₂, halo, S-CF₃, OH, or a variety of (un)substituted functional groups; n = 1 or 2; R² and R³ = independently (halo)alkyl or 3-5 membered (halo)cycloalkyl ring; A-B = NH-C(O), O-CH₂, S-CH₂, (trans)-vinylene, ethynylene, NH-C(S), or C(O)-CH₂; R⁴ = H, OH, halo, NH₂, or Me], and pharmaceutically acceptable salts or in vivo hydrolysable esters thereof, were prepd. Pharmaceutical compns., methods, and processes for prepn. of compds. of formula I are also described. For example, (R)-(+)-2-hydroxy-2-methyl-3,3,3-trifluoropropanoic acid (prepn. given) was mixed with oxalyl chloride and added to 4-(4-acetamidophenylsulfonyl)-2-chloroaniline (prepn. given) in DCM to yield (R)-N-[4-(4-acetamidophenylsulfonyl)-2-chlorophenyl]-2-hydroxy-2-methyl-3,3,3-trifluoropropanamide (R)-(II). Title compds. elevate pyruvate dehydrogenase (PDH) activity (no data) and are useful in the treatment of diabetes mellitus, peripheral vascular disease, cardiac failure and certain cardiac myopathies, myocardial ischemia, cerebral ischemia and perfusion, muscle weakness, hyperlipidemias, Alzheimer's disease, and/or atherosclerosis.

IT 252017-99-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(target compd.; prepn. of N-(arylsulfonylphenyl)-2-hydroxy-2-methyl-3,3,3-trifluoropropanamide derivs. for elevation of pyruvate dehydrogenase (PDH) activity)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 3 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:10283 HCAPLUS

DOCUMENT NUMBER: 130:168225

TITLE: Generation and Trapping of N-Acyliminium Ions Derived from Isomuenchnone Cycloadducts. A Versatile Route to Functionalized Heterocycles

AUTHOR(S): Brodney, Michael A.; Padwa, Albert
 CORPORATE SOURCE: Department of Chemistry, Emory University, Atlanta, GA, 30322, USA
 SOURCE: Journal of Organic Chemistry (1999), 64(2), 556-565
 CODEN: JOCEAH; ISSN: 0022-3263
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 130:168225

AB A series of 2-diazo-N-hept-6-enoylmalonamides were prepd. and treated with a catalytic amt. of rhodium(II) perfluorobutyrate. The resultant carbenoids underwent facile cyclization onto the neighboring amide carbonyl oxygen atom to generate isomuenchnone-type intermediates. Subsequent 1,3-dipolar cycloaddn. across the pendant olefin afforded intramol. cycloadducts in high yield. The cascade sequence is simple, direct, and extremely tolerant of structural diversity. Exposure of these cycloadducts to Lewis acids resulted in oxabicyclic ring opening. N-Acyliminium ions of wide structural variety can be easily generated by this sequence of reactions. Different cyclization pathways become available depending on the nature of the substituent group attached to the amide nitrogen. When the **tethered** group is electrophilic in nature, proton loss from the initially formed N-acyliminium ion occurs rapidly to give an acyl enamide which undergoes a subsequent cyclization at the electrophilic center.

IT 220445-77-2P 220445-83-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (generation and trapping of N-acyliminium ions derived from isomuenchnone cycloadducts)

REFERENCE COUNT: 91 THERE ARE 91 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 4 OF 12 HCAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1996:340182 HCAPLUS
 DOCUMENT NUMBER: 125:12775
 TITLE: Acidic phosphonic acid derivative based internal releasing agents for moldings
 INVENTOR(S): Horihata, Tomoko; Okazaki, Mitsuki; Kanemura, Yoshinobu; Nagata, Teruyuki; Nakashio, Fumyuki; Shinkai, Seiji; Goto, Masahiro
 PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 38 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08057864	A2	19960305	JP 1994-200833	19940825
JP 3308113	B2	20020729		

PRIORITY APPLN. INFO.: JP 1994-200833 19940825
 OTHER SOURCE(S): MARPAT 125:12775

AB The title agents are useful as internal releasing agents for plastics (e.g., polyurethanes).

IT 152993-40-3
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (acidic phosphonic acid deriv. based internal releasing agents for moldings)

L12 ANSWER 5 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1996:81507 HCAPLUS
 DOCUMENT NUMBER: 124:120110
 TITLE: Reactive dye-containing printing inks, their preparation and their use
 INVENTOR(S): Eltz, Andreas; Russ, Werner Hubert
 PATENT ASSIGNEE(S): Hoechst A.-G., Germany
 SOURCE: Ger. Offen., 10 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4417718	A1	19951123	DE 1994-4417718	19940520
EP 684292	A1	19951129	EP 1995-106358	19950427
EP 684292	B1	19981118		
R: CH, DE, FR, GB, IT, LI, NL				
JP 08048897	A2	19960220	JP 1995-119780	19950518
US 5542972	A	19960806	US 1995-444016	19950518
PRIORITY APPLN. INFO.:			DE 1994-4417718	19940520
OTHER SOURCE(S): MARPAT 124:120110				
AB Water-thinned jet printing inks contain .gtoreq.1 reactive dyes Z(G-E-ANMCH)n (A is optionally halogenated alkylene; E is SO ₂ or CO; G is a direct bond or imino group; G, E, and A together may form nitrogen heterocycles contg. 1 or 2 NMCN groups; M is H, alkali metal, alk. earth metal, or ammonium; n is 1-4; Z is an azo or other dye chromophore) in addn. to alk. or basic agents. The inks have dyes with improved storage stability. Thus, C.I. Reactive Black 5 was treated with cyanamide to give a bis(cyanamidoethylsulfonyl) reactive dye which was incorporated into an ink compn. also contg. triethanolamine as a basic agent. The compn. was storage stable and noncorrosive.				
IT 173063-32-6P 173063-33-7P 173063-34-8P 173063-35-9P				
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (reactive dyes for jet-printing inks)				

L12 ANSWER 6 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1994:108740 HCAPLUS
 DOCUMENT NUMBER: 120:108740
 TITLE: Sulfur-containing phosphoric acid ester internal release agent
 INVENTOR(S): Kusumoto, Masahiko; Yamashita, Hiroyuki; Nagata, Teruyuki
 PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan
 SOURCE: Eur. Pat. Appl., 72 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 553801	A1	19930804	EP 1993-101236	19930128
EP 553801	B1	19970423		
R: DE, FR, GB, IT				
US 5389708	A	19950214	US 1993-9761	19930127
JP 05306320	A2	19931119	JP 1993-12490	19930128
JP 3263162	B2	20020304		
AU 9332115	A1	19930805	AU 1993-32115	19930129

AU 659522 B2 19950518
 PRIORITY APPLN. INFO.: JP 1992-15878 A 19920131
 JP 1992-17497 A 19920203
 JP 1992-19620 A 19920205
 JP 1992-26471 A 19920213
 JP 1992-44532 A 19920302
 JP 1992-46661 A 19920304
 JP 1992-48277 A 19920305

OTHER SOURCE(S): MARPAT 120:108740

AB Dialkyl (di)thiophosphoric acid esters are useful as release agents for transparent resins (e.g. polyurethanes). The release agents do not cause deterioration of transparency and are useful in manuf. of lenses.

IT 152993-40-3P

RL: PREP (Preparation)

(prepn. of, transparent, internal release agents for)

L12 ANSWER 7 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1993:559790 HCAPLUS

DOCUMENT NUMBER: 119:159790

TITLE: Synthesis and investigation of the nonlinear optical properties of various p-aminophenyl sulfone oligomers

AUTHOR(S): Mitchell, Michael A.; Tomida, Masayuki; Padias, Anne Buyle; Hall, H. K., Jr.; Lackritz, Hilary S.; Robello, Douglas R.; Willand, Craig S.; Williams, David J.

CORPORATE SOURCE: Dep. Chem., Univ. Arizona, Tucson, AZ, 85721, USA

SOURCE: Chemistry of Materials (1993), 5(7), 1044-51

CODEN: CMATEX; ISSN: 0897-4756

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A series of p-aminophenyl sulfone oligomers (monomers, dimers, and trimers) was synthesized with the purpose of studying the effect of several consecutive dipolar units on their second-order nonlinear optical (NLO) characteristics. Three classes of oligomers were synthesized, namely with a hexamethylene, dimethylene, or piperidine spacer. The dipole moments of these oligomers and the $\mu\beta\alpha$ value, as measured by EFISH (elec. field induced second harmonic generation), are reported. The results show that these compds., despite their head-to-tail arrangement, lack the structural features needed to display enhancement of the hyperpolarizability.

IT 150221-12-8P 150221-19-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of, as nonlinear optical material)

L12 ANSWER 8 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1972:421588 HCAPLUS

DOCUMENT NUMBER: 77:21588

TITLE: 1,5-Diaryl-3-styryl-.DELTA.2-pyrazolines as fluorescent whiteners

PATENT ASSIGNEE(S): Farbwerke Hoechst A.-G.

SOURCE: Brit., 11 pp.
 CODEN: BRXXAA

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 1264671		19720223		

PRIORITY APPLN. INFO.: DD 1968-5801 19680419

AB Twenty-four title compds. were prepd. having the general structure I, where R = H or Cl, X = CH:CH₂ or CH₂CH₂Y, and Y = OH, SO₃Na, alkoxy, alkylamino, aminoalkylamino, aminoalkoxy, or quaternized aminoalkoxy.

Mixts. of I and known compds. of structure II (R and X as described) imparted a higher degree of whiteness to nylon, cellulose triacetate, or polyacrylonitrile than either I or II alone. For example, a mixt. of PhCH:CHCOCH:CHPh, 4-H2NNHC6H4CH2CH2OH, alc., and HCl was refluxed, cooled, and stirred 2 hr at 0.deg. to give 90% hydroxyethyl deriv. (I, R = H, X = CH2CH2OH) (III) [26505-13-5]. III was sulfated and treated with KCl to give the K sulfate deriv. which was refluxed in aq. Me2CO, and 2N NaOH was added to give the vinyl compd. (I, R = H, X = CH:CH2) (IV) [29244-99-3]. Treatment of IV with Me2NCH2CH(OH)Me and 33% NaOH soln. for 1 hr at 60.deg. gave an aminoalkyl ether (I, R = H, X = CH2CH2OCHMeCH2NMe2) [29244-95-9]. The other I were similarly prepd.

IT 29244-86-8P

RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of)

L12 ANSWER 9 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1966:465338 HCAPLUS
DOCUMENT NUMBER: 65:65338
ORIGINAL REFERENCE NO.: 65:12138d-h,12139a-b
TITLE: Individual racemates of N-(p-hydroxyphenylisopropyl)arterenol
INVENTOR(S): Dijk, Jan van
PATENT ASSIGNEE(S): North American Philips Co., Inc.
SOURCE: 5 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3250803		19660510	US	

PRIORITY APPLN. INFO.: NL 19610706

AB The redn. of a tribenzyl ketone such as 3,4-(PhCH2O)2C6H3COCH2NHCHMeCH2C6H4OCH2Ph-4 (I) with NaBH4 dissolved in MeOH to give a racemic mixt., m. 55-75.degree. of 3,4 - (PhCH2O)2C6H3CH(OH)CH2NHCHMeCH2C6H4OCH2Ph - 4 (.alpha.,.beta.-II) or salts thereof is described. .alpha.,.beta.-II is sepd. by fractional crystn. of the free bases or by conversion of the free bases into a mixt. of salts and then sepg. the salt mixt. by fractional crystn. Thus, 60%, 4-BzC6H4CH:CMENO2, m. 144-6.degree., was prepd. in the conventional manner and was then hydrogenated in the usual way to give a 74% yield of the corresponding satd. amine which was in turn treated with 3',4'-bis(benzyloxy)-2-bromoacetophenone to give a 94% yield of I.HCl, m. 204-10.degree. (decompn.). NaOH (4.40 g.) dissolved in 50 ml. H2O and 200 ml. tetrahydrofuran was added to a soln. of 67.0 g. I.HCl in 1.7 l. MeOH, 13.0 g. NaBH4 in 500 ml. MeOH and 5 ml. 2N NaOH added, the mixt. heated to boiling and refluxed 2 hrs., 1.5 l. solvent removed by evapn. in vacuo, 2 l. H2O added, another 1.6 l. of liquid distd. in vacuo, 500 ml. C6H6 added, the C6H6 layer sepd., dried, and evapd. in vacuo, the residue dissolved in 150 ml. of Et2O while heating, and the soln. cooled to room temp. to give 94% .alpha.,.beta.-II, m. 55-75.degree.. II (30 g.) in 150 ml. of Et2O was stored at room temp. 16 hrs., crystn. began, the mixt. scratched and kept an addnl. hr., and 8.3 g. crystals sepd. to give 7 g. .alpha.-II, m. 69-72.degree.. The Et2O filtrate of this fraction was stored at 0-5.degree. 1.5 hrs. to give 4 g. .beta.-II, m. 92-4.degree. (C6H6petr. ether). To 5.7 g. .alpha.,.beta.-II and 1.7 g. BzOH in 250 ml. EtOH was added 40 ml. H2O, the mixt. filtered, and the residue washed with 5:2 EtOH-H2O to give .alpha.-II benzoate, m. 156-8.degree. (C6H6) and .beta.-II, benzoate, m. 138.5-9.degree.. The benzoates were then converted to .alpha.-II, m. 72.degree. and .beta.-II, m. 88.degree. in the usual manner. Alternatively, 18.5 g. p-MeC6H4SO3H in 100 ml. H2O and 75 ml. Et2O added to 18.5 g. .alpha.,.beta.-II in 900 ml. EtOH, 26 g. crystals, m. 132-7.degree. (dissoctn.) sepd. after 5 days at room temp.,

0.5 l. solvent evapd. from the filtrate, 3.5 g. crystals, m. 133-7.degree. sepd. after 4 more days, which dissolved **together** while shaking in a mixt. comprised of H₂O 150, EtOH 50, 2N NaOH 25, and C₆H₆ 200 ml., the aq. layer sepd. and washed with Et₂O, the combined C₆H₆ and Et₂O layers washed with H₂O, dried, and evapd. to .apprx.100 ml., and 125 ml. petr. **ether** added gave 17.5 g. .beta.-II, m. 94-5.degree.. To the filtrate of the 29.5 g. crystals was added 50 ml. 2N NaOH, 600 ml. C₆H₆, and 1 l. H₂O, the mixt. shaken, the layers sepd., the aq. layer washed with C₆H₆ and combined with the org. liquid layer, the combined h layers washed with H₂O, dried with Na₂SO₄, the solvent evapd. in vacuo to .apprx.150 ml., and petr. **ether** added to give 24 g. .alpha.-II, m. 71-2.degree. (C₆H₆-petr. **ether**). Upon heating to 80.degree., .alpha.-II resolidified, m. 85-88.degree.. .alpha.-II benzoate thus obtained m. 156-8.degree.. To 15 ml. 1% aq. PdCl₂ was added 1.5 g. C and 75 ml. H₂O, the mixt. filtered, the residue washed with H₂O, the hydrated catalyst added to 9.05 g. .alpha.-II benzoate in 600 ml. EtOH, the mixt. shaken with H at 1.1 atm./room temp. until absorption of the calcd. amt. of H, the catalyst filtered off, the filtrate evapd. in vacuo to .apprx.100 ml., 50 ml. H₂O added, and the liquid evapd. in vacuo until turbidity, and cooled 15 hrs. at .apprx.5.degree. gave 4.8 g. .alpha.-3,4-(HO)2C₆H₃CH(OH)CH₂NHCHMeCH₂C₆H₄OH - 4 (.alpha.-II) benzoate, vitrified 102-8.degree. m. 105-10.degree., decompd. 130-3.degree.. To 1 g. .alpha.-III benzoate in 15 ml. H₂O was added 1.1 ml. 2.5N NH₄OH at 60.degree. to give free .alpha.-III, m. 171-3.degree. (decompn.); phenoxyacetate m. 175-6.degree. (decompn.); phenylacetate m. 156-8.degree. (decompn.). Similarly obtained was .beta.-III benzoate, vitrified 111-12.degree., m. 112.degree., decompd. 145-6.degree., and .beta.-III, m. 163-8.degree. (decompn.); phenoxyacetate m. 175-6.5.degree. phenylacetate m. 151-4.5.degree.. .alpha. and .beta.-III are useful as bronchospasmolytics.

IT 7291-83-0, Benzoic acid, 2-[[[1-[p-[p-[2-[p-[(4-amino-3-sulfo-1-anthraquinonyl)amino]anilino]ethyl]sulfonyl]benzamido]phenyl]-5-hydroxy-3-methylpyrazol-4-yl]azo]-5-sulfo-
(prepn. of)

L12 ANSWER 10 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1965:29534 HCAPLUS
DOCUMENT NUMBER: 62:29534
ORIGINAL REFERENCE NO.: 62:5229d-e
TITLE: Aralkyl isothiocyanates
PATENT ASSIGNEE(S): Rhone-Poulenc S.-A.
SOURCE: 9 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
NL 64000387		19640722	NL	

PRIORITY APPLN. INFO.: FR 19630121

AB C₆H₄(NCS)(Q NCS)(I) and 1,4-(SCNx)2-C₆H₄(II) are prepd. by treating the appropriate diamine either with CSCl₂ or with a mixt. of CS₂ and an alkali hydroxide, or by treating the appropriate aralkyl halide with a thiocyanate. Thus, adding slowly with stirring 25.5 g. CSCl₂ to a suspension of 11.45 g. p-H₂NCH₂C₆H₄NH₂ and 21 g. CaCO₃ in 100 ml. H₂O at 0-20.degree. and stirring the mixt. 16 hrs. at 25.degree. yielded 7.6 g. 1-isothiocyanato-4-isothiocyanatomethylbenzene, m. 64.degree. (iso-Pr₂O). Similarly prepd. were the following I (Q, position of NCS group, and m.p. given): O(CH₂)₅, 4, 57.degree. (C₆H₁₂); OCH₂CH₂, 2, 28-9.degree. (b0.2 145-55.degree.); OCH₂CH₂, 4, 80.degree. (C₆H₆-C₆H₁₂); (CH₂)₃, 4, 50-1.degree. (C₆H₁₂-petr. **ether**); O(CH₂)₈, 4, 66.degree. (C₆H₁₂), SCH₂CH₂, 4, 38-9.degree. (C₆H₁₂); CONHCH₂CH₂, 4, 127-8.degree. (C₆H₆);

SO₂CH₂CH₂, 4, 97-8.degree. (C₆H₆C₆H₁₄); O(CH₂)₄, 4, 37-8.degree. (C₇H₁₆),
 NHCOCHO₂, 4, 186.degree. (AcOEt). Also prepd. were the following II (X
 and m.p. given): CH₂, 64.degree. (C₆H₁₂); (CH₂)₂, 99.degree. (C₆H₁₂);
 O(CH₂)₃, 110.degree. (C₆H₆); O(CH₂)₂, 120.degree. (C₆H₆-C₆H₁₂). The
 compds. have acaricidal and fungicidal activity.

IT 1021-56-3, Isothiocyanic acid, diester with 2-[(p-
 hydroxyphenyl)sulfonyl]ethanol
 (prepn. of)

L12 ANSWER 11 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1961:64883 HCAPLUS
 DOCUMENT NUMBER: 55:64883
 ORIGINAL REFERENCE NO.: 55:12341d-i
 TITLE: Synthesis and action of local anesthetics derived from
 procaine
 AUTHOR(S): Buchi, J.; Enezian, J.; Enezian, G.; Valette, G.;
 Pattani, C.
 SOURCE: Helvetica Chimica Acta (1960), 43, 1971-9
 CODEN: HCACAV; ISSN: 0018-019X
 DOCUMENT TYPE: Journal
 LANGUAGE: French

AB To p-O₂NC₆H₄ONa (from 42 g. p-O₂NC₆H₄OH, 12 g. NaOH, and 45 ml. H₂O) were
 added 62 g. K₂CO₃, 210 ml. xylene, and 51 g. Cl(CH₂)₂NEt₂.HCl, the mixt.
 re-refluxed 60 hrs., cooled, H₂O added, the mixt. extd. with xylene, the
 xylene layer washed, dried, and distd. to give 66 g. p-O₂NC₆H₄O(CH₂)₂NEt₂
 (I), b_{0.1} 145.degree.. I (66 g.) reduced catalytically in 500 ml. alc.
 with 5% Pd-C gave 53.1 g. p-H₂NC₆H₄O(CH₂)₂NEt₂ (II), b_{0.4} 128.degree.. II
 (53.1 g.) in 50 ml. Et₂O satd. cold with dry HCl gave 53 g. hydrochloride,
 m. 140-1.degree. (decompn.) (alc.). To p-O₂NC₆H₄SK (from 60 g.)
 p-O₂NC₆H₄SH, 22.4 g. KOH, and 420 ml. EtOH was added dropwise 60 g.
 Cl(CH₂)₂NEt₂, the mixt. refluxed 12 hrs., cooled, filtered, evapd. in
 vacuo, the residue dissolved in dil. alc., the soln. extd. with Et₂O, and
 the ext. washed, dried and evapd. to give 75 g. p-O₂NC₆H₄S(CH₂)₂NEt₂
 (III). III could be distd. with care, b_{0.15} 156.degree., m. 12.degree.;
 HCl salt m. 170-1.degree. (EtOH). III (66 g.) reduced catalytically in
 500 ml. 95% EtOH with a large excess of Raney Ni gave 50.5 g.
 p-H₂NC₆H₄S(CH₂)₂NEt₂, b_{0.1} 113.degree.. III (12.5 g.) in 50 ml. glacial
 HOAc was treated at 0.degree. with 44.64 ml. 3.57% H₂O₂, the mixt. kept 7
 days at room temp., and concd. at 45.degree. in vacuo to give
 p-O₂NC₆H₄SO(CH₂)₂NEt₂ (IV) as acetate (10.6 g.), m. 66.0-7.5.degree.; HCl
 salt m. 188.5-90.degree.. IV (5 g.) in 200 ml. abs. alc. reduced
 catalytically with Raney Ni gave 3 g. p-H₂NC₆H₄SO(CH₂)₂NEt₂, m.
 75-6.degree.. Ph(CH₂)₃Cl (10-12 g.) was added slowly with stirring to
 40-50 ml. HNO₃ (d. 1.47) at -15.degree., the mixt. poured on ice,
 neutralized to pH 8 with Na₂CO₃, extd. with Et₂O, and the ext. washed,
 dried, and distd. to give 84.5% p-O₂NC₆H₄(CH₂)₃Cl (V), b_{0.25} 138.degree..
 V (48 g.) was refluxed 6 hrs. with 42 g. Et₂NH in 150 ml. dry C₆H₆, the
 mixt. filtered, the C₆H₆ soln. washed, dried, and distd. to give 45.5 g.
 p-O₂NC₆H₄(CH₂)₃NEt₂ (VI), b_{0.25} 133-5.degree.. VI (45.5 g.) reduced
 catalytically with 10% Pd-C gave 31.5 g. p-H₂NC₆H₄(CH₂)₃NEt₂, b_{0.33}
 126-7.degree.; hydrochloride m. 195.5-6.5.degree. (abs. alc.).
 p-O₂NC₆H₄Ac (82.5 g.), 71.5 g. Et₂NH.HCl, 20 g. paraformaldehyde, 100 ml.
 EtOH, and 1 ml. concd. HCl was refluxed 4 hrs., 20 g. more
 paraformaldehyde added, the mixt. refluxed 3 hrs., filtered rapidly hot,
 500 ml. dry Me₂CO added, and the mixt. kept several days at 0.degree. to
 give 68.5-103.5 g. p-O₂NC₆H₄CO(CH₂)₂NEt₂ (VII) as HCl salt, m.
 136.5.degree. (decompn.). VII.HCl (10 g.) was hydrogenated in 200 ml.
 distd. H₂O with 10% Pd-C at 100-140 atm., the mixt. filtered, neutralized
 at 0.degree. with NH₃ to pH 8.5, extd. with Et₂O, the exts. washed, dried,
 concd. below 40.degree., and petr. ether added to give 80-90%
 p-H₂NC₆H₄CO(CH₂)₂NEt₂, m. 71-2.degree.; hydrochloride m. 146.degree.
 (decompn.) (abs. EtOH). None of the amines prepd. had surface anesthetic
 effects, but all were less active in local conduction anesthesia than

procaine.

IT 100862-20-2, Acetanilide, 4'-(2-diethylaminoethylsulfonyl)-
(prepn. of)

L12 ANSWER 12 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1952:48438 HCAPLUS

DOCUMENT NUMBER: 46:48438

ORIGINAL REFERENCE NO.: 46:8041b-i,8042a-b

TITLE: Antituberculous compounds. IX. Some dialkylaminoalkyl
sulfones and related compounds

AUTHOR(S): Peak, D. A.; Watkins, T. I.

CORPORATE SOURCE: Boots Pure Drug Co. Ltd., Nottingham, UK

SOURCE: Journal of the Chemical Society, Abstracts (1951)
3292-6

CODEN: JCSAAZ; ISSN: 0590-9791

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB Na₂S₂O₃ (25 g.) in 100 cc. H₂O, added to 20 g. C₈H₁₇Br in 110 cc. EtOH and refluxed 3.5 hrs., gives 16 g. Na octyl thiosulfate, with 1 mol. H₂O. C₁₆H₃₃I (7 g.), 5 g. Na₂S₂O₃, 15 cc. EtOH, and 11 cc. H₂O, refluxed 3 hrs., give 5.9 g. Na hexadecyl thiosulfate, with 2 mols. H₂O. Et₂NCH₂CH₂Br.HBr (20 g.), 76.6 cc. N-NaOH, and 19 g. Na₂S₂O₃, stirred 20 min. at 35-40.degree., give 11.8 g. Na 2-diethylaminoethyl thiosulfate, decomp. appreciably at 100.degree.; Et₂NCH₂CH₂Cl gives the same compd. but the reaction is slower. (C₈H₁₇)₂NCH₂CH₂Cl.HCl (4.8 g.) in 12 cc. EtOH, treated with 13.95 cc. 0.1 N NaOH and then with 3.5 g. Na₂S₂O₃ in 7 cc. H₂O, the mixt. stirred 8 hrs. at room temp. (iodine titer 50% of the original value), and the residue extd. with warm EtOH, gives 3.2 g. bis(2-diethylaminoethyl)thiosulfate, m. 138.degree. (monopicate, yellow); the same result is obtained with temps. from 0 to 75.degree.. Et₂NCH₂CH₂Cl (48 g.), added to 1 mol. MeSNa in 200 cc. EtOH and refluxed 1 hr., gives 28 g. 2-diethylaminoethyl Me sulfide, b₁₅₀ 141-5.degree. (HCl salt, too hygroscopic for analysis). Homologs, Et₂NCH₂CH₂sr: R = Bu (I), b_{2.5} 82.degree.; octyl (II), b_{0.7} 116-18.degree.; hexadecyl, b_{0.2} 184.degree.. PrSH (24.5 g.) and 30.7 g. HO(CH₂)₃Cl in 200 cc. EtOH contg. 7.5 g. Na, refluxed 1.5 hrs., give 35 g. PrS(CH₂)₃OH (III), b₁₆ 115.degree.; 10 g. III, 6 g. C₅H₅, and 8 cc. CHCl₃, added slowly to 8.9 g. SOCl₂ in 8 cc. CHCl₃ at 10-13.degree., kept overnight, and refluxed 1.5 hrs., give 9 g. PrS(CH₂)₃Cl, b₃₄ 104.degree.; heated 5 hrs. with 16 g. Et₂NH at 120-30.degree., it yields 4.1 g. 3-diethylaminopropyl Pr sulfide, b₃₈ 138-9.degree.. Et₂NCH₂CH₂SH.HCl (12.6 g.) in 15 cc. CHCl₃, treated with 2.7 g. PrCHO, satd. at 10-15.degree. with HCl, and warmed 1 hr. at 50.degree., gives 7 g. butyraldehyde bis(2-diethylaminoethyl)mercaptal, yellow, b_{0.7} 151-2.degree.; di-HCl salt, m. 188-9.degree.; mono-HCl salt, m. 209-10.degree.. II (15 g.) in 61 cc. N HCl, treated with 13 cc. 18% H₂O₂ (temp. not above 28.degree.), gives 11 g. 2-diethylaminoethyl octyl sulfoxide, b_{0.1} 138-40.degree. (reineckate, m. 106-7.degree.). I (7 g.) in 5 cc. 50% aq. AcOH, treated at 0-3.degree. with 160 cc. 3% KMnO₄ in 50% AcOH, gives 3.2 g. Bu 2-diethylaminoethyl sulfone, b₃ 144.degree.; octyl homolog, b_{0.1} 152.degree. (reineckate, m. 122.degree.); hexadecyl homolog, b_{0.07} 205-6.5.degree. (reineckate, m. 132.degree.). C₈H₁₇SH (5.84 g.) in 50 cc. EtOH contg. 0.92 g. Na and 3.85 g. (ClCH₂CH₂)₂NMe. HCl in 50 cc. EtOH contg. 0.46 g. Na, refluxed 2 hrs. and the product (3.9 g., b_{0.5} 180-6.degree.) oxidized with KMnO₄, give 1.9 g. methylbis(2-octylsulfonylethyl)amine, m. 185.degree. (HCl salt, m. 197.degree.). Et₂NCH₂CH₂Cl (40 g.) in 309 cc. BuOH contg. 6.9 g. Na, heated 15 hrs. on the steam bath, gives 38 g. Bu 2-diethylaminoethyl ether, b₂₀₀ 144.degree. [reineckate, m. 122.degree. (decompn.)]; octyl homolog, b₁₀ 130-3.degree.. C₇H₁₅Br (6 g.) and 12 g. Et₂NH, heated 4 hrs. at 130.degree., give 4.8 g. crude C₇H₁₅NEt₂ which, distributed between petr. ether and N HCl, gives the pure amine, b₂₀₀ 156.degree.. C₁₁H₂₃Br (10 g.), 7 g. Et₂NH, and 10 cc. xylene, heated 5 hrs. at 170.degree., give 7.5 g. N,N-diethylhendecylamine, b₂ 85-6.degree. (reineckate, m.

71.degree.). C₉H₁₉COMe (8.5 g.), 3 g. (HCHO)₃, 5.5 g. Et₂N.HCl, 0.2 cc. concd. HCl, 20 cc. C₆H₆, and 20 cc. PhNO₂, heated 45 min. at 110.degree. and 15 min. at 145.degree., give 6.9 g. 2-diethylaminoethyl nonyl ketone, b_{0.5} 118-22.degree.. (Et₂NCH₂CH₂)₂S (4.6 g.) in 15 cc. ice-cold H₂O, treated with a slight excess of Br-H₂O, gives 5.5 g. bis(2-diethylaminoethyl) sulfoxide-2HBr, m. 224.degree. (decompn.); KMnO₄ in 50% AcOH gives 6.4 g. bis(2-diethylaminoethyl) sulfone-2HCl, m. 202.degree.. Et₂NCH₂CH₂SH.HCl (m. 172-3.degree.), exposed overnight to air, gives the disulfide-2HCl, m. 220.degree.. Et₂NCH₂CH₂Cl (27 g.), added to the Na salt from 35 g. p-AcNHC₆H₄SO₂H in 500 cc. EtOH and refluxed 1.5 hrs., gives 3 g. of an unknown compd., m. 284.degree. (N, 7.2%), and, on extn. of the residue from the filtrate with 2 N HCl, 16 g. of the N-Ac deriv., m. 93-4.degree., of p-aminophenyl 2-diethylaminoethyl sulfone, m. 55.degree.. p-MeC₆H₄SO₂CH₂OH (2 g.) and 1.14 g. PhNMe in 75 cc. ether quickly give 2.05 g. N-(p-tolylsulfonylmethyl)aniline, m. 109.degree.. N₄-(p-Tolylsulfonylmethyl)sulfanilamide, m. 166-7.degree.; 2-methyl-5-(p-tolylsulfonylmethylamino)-1,3,4-oxadiazole, m. 170.degree.; 4-(p-tolylsulfonylmethyl)morpholine, m. 86-9.degree.. The activities of compds. against Mycobacterium tuberculosis are reported; the sulfides are outstandingly active in vitro; the sulfones have a low order of activity; the one sulfoxide had intermediate activity.

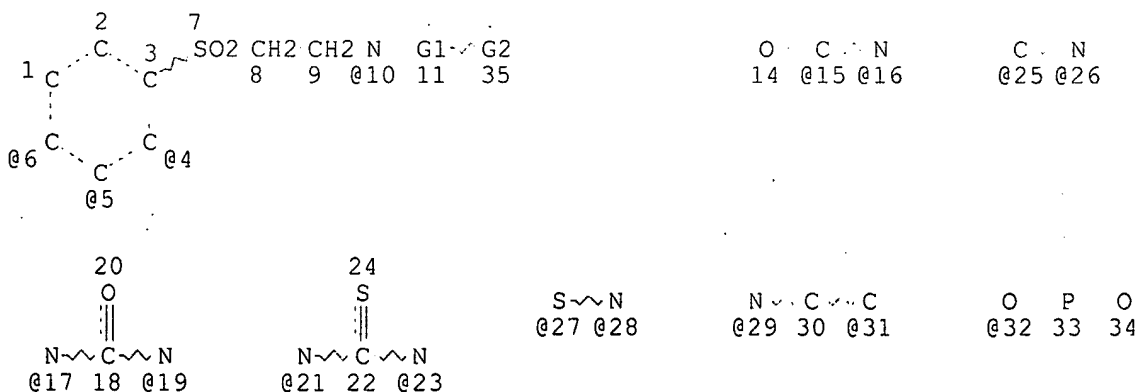
IT 100862-20-2, Acetanilide, 4'-(2-diethylaminoethylsulfonyl)-
(prepn. of)

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L3 STR



VAR G1=15/16/17/19/21/23/25/26/27/28/29/31/32

VAR G2=4/5/6/10

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

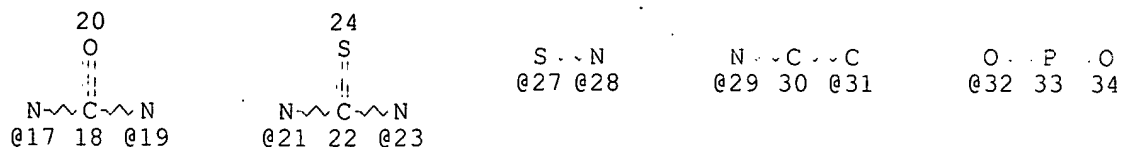
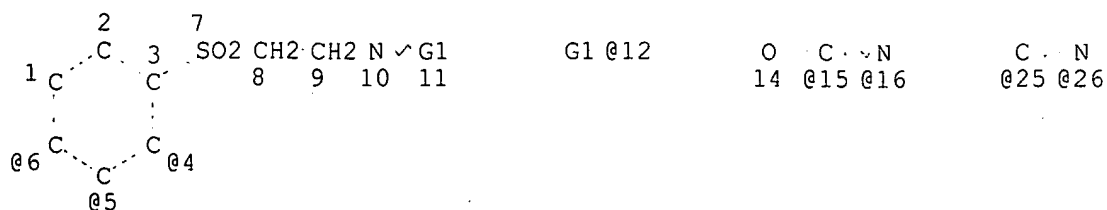
RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 33

STEREO ATTRIBUTES: NONE

L4 (293)SEA FILE=REGISTRY SSS FUL L3

L5 STR



VAR G1=15/16/17/19/21/23/25/26/27/28/29/31/32

VPA 12-4/5/6 U

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 33

STEREO ATTRIBUTES: NONE

L6 (4)SEA FILE=REGISTRY SUB=L4 SSS FUL L5

L7 289 SEA FILE=REGISTRY ABB=ON PLU=ON L4 NOT L6

L8 91 SEA FILE=HCAPLUS ABB=ON PLU=ON L7

L9 1 SEA FILE=REGISTRY ABB=ON PLU=ON OLIGOETHER/BI

L10 168 SEA FILE=REGISTRY ABB=ON PLU=ON POLYETHER/BI OR POLYETHERS/BI

L11 1273885 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 OR L10 OR ?ETHER?

L12 12 SEA FILE=HCAPLUS ABB=ON PLU=ON L11 AND L8

L13 0 SEA FILE=HCAPLUS ABB=ON PLU=ON (L8 AND (MARKER? OR ?SPECTRO?))

) NOT L12

=> d stat que 120 nos

L3 STR

L4 (293)SEA FILE=REGISTRY SSS FUL L3

L5 STR

L6 (4)SEA FILE=REGISTRY SUB=L4 SSS FUL L5

L7 289 SEA FILE=REGISTRY ABB=ON PLU=ON L4 NOT L6

L8 91 SEA FILE=HCAPLUS ABB=ON PLU=ON L7

L9 1 SEA FILE=REGISTRY ABB=ON PLU=ON OLIGOETHER/BI

L10 168 SEA FILE=REGISTRY ABB=ON PLU=ON POLYETHER/BI OR POLYETHERS/BI

L11 1273885 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 OR L10 OR ?ETHER?

L12 12 SEA FILE=HCAPLUS ABB=ON PLU=ON L11 AND L8

L17 3985 SEA FILE=REGISTRY ABB=ON PLU=ON PORPHYRIN OR HEXAHISTIDINE

OR MULTIDENT? OR BIDENT? OR EDTA

L18 162196 SEA FILE=HCAPLUS ABB=ON PLU=ON L17 OR PORPHYRIN OR HEXAHISTIDINE

OR MULTIDENT? OR BIDENT? OR EDTA

L20 0 SEA FILE=HCAPLUS ABB=ON PLU=ON (L8 AND (L18 OR METAL(2A)ION))

NOT L12

=> d stat.que 124 nos

L3 STR
 L4 (293)SEA FILE=REGISTRY SSS FUL L3
 L5 STR
 L6 (4)SEA FILE=REGISTRY SUB=L4 SSS FUL L5
 L7 289 SEA FILE=REGISTRY ABB=ON PLU=ON L4 NOT L6
 L8 91 SEA FILE=HCAPLUS ABB=ON PLU=ON L7
 L9 1 SEA FILE=REGISTRY ABB=ON PLU=ON OLIGOETHER/BI
 L10 168 SEA FILE=REGISTRY ABB=ON PLU=ON POLYETHER/BI OR POLYETHERS/BI

 L11 1273885 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 OR L10 OR ?ETHER?
 L12 12 SEA FILE=HCAPLUS ABB=ON PLU=ON L11 AND L8
 L23 7 SEA FILE=HCAPLUS ABB=ON PLU=ON (L8 AND (ION OR METAL)) NOT L12
 L24 7 SEA FILE=HCAPLUS ABB=ON PLU=ON L23 NOT L12

=> d ibib abs hitrn 124 1-7

L24 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:933984 HCAPLUS

DOCUMENT NUMBER: 136:55223

TITLE: Sulfo- and phenylaminosulfonyl-substituted phthalocyanine compounds for ink-jet printing

INVENTOR(S): Kenworthy, Mark

PATENT ASSIGNEE(S): Avecia Limited, UK

SOURCE: U.S., 12 pp.

CODEN: USXXAM

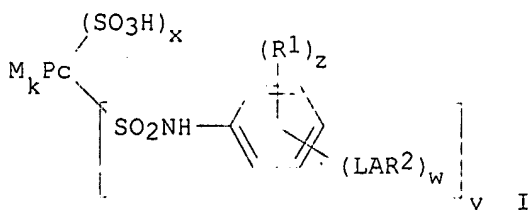
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6332918	B1	20011225	US 1999-250179	19990216
PRIORITY APPLN. INFO.:			GB 1998-3232	A 19980217
OTHER SOURCE(S):	MARPAT 136:55223			
GI				



AB The substituted phthalocyanine dyes I were synthesized and used as colorants in inks for ink-jet printing, where M = H, **metal**, halometal, oxymetal or hydroxymetal, Pc = phthalocyanine nucleus, L = a linking group comprising an optionally substituted C1-30 hydrocarbyl, A = O, S, NR3, R1 = optional substituent or optionally substituted C1-15 hydrocarbyl, R2 = optionally substituted C1-30 hydrocarbyl having .gtoreq.1 alkyl group substituted with .gtoreq.1 hydroxy, carboxy and sulfo, R3 = H or optionally substituted C1-30 hydrocarbyl, k = half of the valence of M, z = 0-4, w = 1-5, (w+z) = 1-5, x, y = nonzero no., (x+y) = 1-6, and the optional substituent comprising .gtoreq.1 carboxy, sulfo, hydroxy, amino, mercapto, cyano, nitro and halo. The phthalocyanine

colorants produce prints with good optical d., light and water fastness.

IT 288271-12-5P 288271-13-6P 288271-14-7P
 288271-18-1P 288271-20-5P 288271-21-6P
 382145-28-0P 382145-29-1P 382145-30-4P
 382145-31-5P 382145-32-6P 382145-33-7P
 382145-34-8P 382145-35-9P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(Sulfo- and phenylaminosulfonyl-substituted phthalocyanine compds. for ink-jet printing)

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:610569 HCAPLUS

DOCUMENT NUMBER: 133:178901

TITLE: Sulfo- and phenylaminosulfonyl-substituted phthalocyanine dyes and their use in ink-jet inks

INVENTOR(S): Kenworthy, Mark

PATENT ASSIGNEE(S): Avecia Ltd., UK

SOURCE: Brit. UK Pat. Appl., 27 pp.

CODEN: BAXXDU

DOCUMENT TYPE: Patent

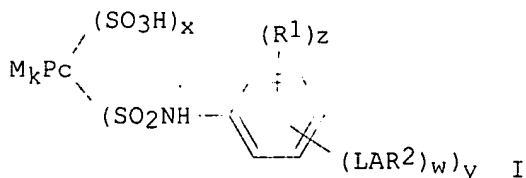
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2341868	A1	20000329	GB 1999-27927	19991126
PRIORITY APPLN. INFO.:			GB 1999-27927	19991126
OTHER SOURCE(S):	MARPAT 133:178901			

GI



AB The substituted phthalocyanine dyes I (M = H, metal halometal, oxymetal, hydroxymetal; Pc = phthalocyanine nucleus; L = link group comprising a optionally substituted C1-30 hydrocarbyl; A = O, S, NR₃; R₁ = optional substituent, optionally substituted C1-15 hydrocarbyl; R₂ = optionally substituted C1-30 hydrocarbyl having .gtoreq.1 alkyl substituted with .gtoreq.1 OH, carboxy and sulfo; R₃ = H, optionally substituted C1-30; k = half of the valency of M; z = 0-4; w = 1-5; w + z = 1-5; x, y = nonzero no.; x + y = 1-6; optional substituent contg. .gtoreq.1 carboxy, sulfo, hydroxy, amino, mercapto, cyano, nitro and halo), are as colorants in ink-jet inks having good optical d., and water and light fastness.

IT 288271-12-5P 288271-13-6P 288271-14-7P
 288271-18-1P 288271-20-5P 288271-21-6P

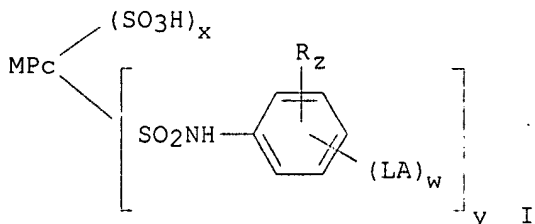
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(dye; sulfo- and phenylaminosulfonyl-substituted phthalocyanine dyes for ink-jet inks)

L24 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:194213 HCAPLUS
 DOCUMENT NUMBER: 130:238784
 TITLE: Phthalocyanine dyes, their preparation and their use in ink-jet inks
 INVENTOR(S): Gregory, Peter; Kenworthy, Mark
 PATENT ASSIGNEE(S): Zeneca Limited, UK
 SOURCE: PCT Int. Appl., 27 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9913009	A1	19990318	WO 1998-GB2545	19980824
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, VZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9888713	A1	19990329	AU 1998-88713	19980824
EP 1009775	A1	20000621	EP 1998-940373	19980824
EP 1009775	B1	20030521		
R: CH, DE, FR, GB, LI				
JP 2001515943	T2	20010925	JP 2000-510807	19980824
US 6235097	B1	20010522	US 2000-486832	20000302
PRIORITY APPLN. INFO.:				
GB 1997-18876 A 19970905				
WO 1998-GB2545 W 19980824				
OTHER SOURCE(S): MARPAT 130:238784				
GI				



AB The phthalocyanine dyes (I; M = H or metal; Pc = phthalocyanine; L = optionally substituted C1-30-hydrocarbonyl linking group; A = a group comprising at least one of: amino and optionally substituted C1-30-hydrocarbonyl comprising at least one protonable nitrogen atom; but where A comprises other than an alkyl group substituted by at least one of: hydroxy, carboxy and sulfo; R = a group independently comprising at least one of: an optional substituent and optionally substituted C1-15-hydrocarbonyl; independently comprising at least one of: an optional substituent and optionally substituted C1-15-hydrocarbonyl; z = 0-4; w = 1-5; w + z = 1-5; x, y are non-zero nos.; the mean of x + y = .apprx.1-6) or their salts or other forms are colorants for ink-jet inks. The colorants produce prints with good optical d. and fastness properties. In an example, CuPc(SO2Cl)4 was treated with p-aminophenyl 2-sulfatoethyl sulfone, water, and 1-(2-aminoethyl)piperazine to give a dye, which was used in its ammonium salt form for printing.
 IT 221356-40-7P 221356-42-9P 221356-44-1P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(dye; prepn. of phthalocyanine dyes for water-based ink-jet inks)

IT 104994-15-2 104994-17-4 105038-63-9

RL: TEM (Technical or engineered material use); USES (Uses)
(phthalocyanine dyes for water-based ink-jet inks)

IT 221355-13-1P 221355-15-3P 221355-17-5P

RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of phthalocyanine dyes for water-based ink-jet inks)

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1996:91807 HCAPLUS

DOCUMENT NUMBER: 124:120109

TITLE: Dyes with hydrolytically stable reactive groups, their preparation and their use

INVENTOR(S): Eltz, Andreas

PATENT ASSIGNEE(S): Hoechst A.-G., Germany

SOURCE: Ger. Offen., 19 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4417719	A1	19951123	DE 1994-4417719	19940520

PRIORITY APPLN. INFO.: DE 1994-4417719 19940520

OTHER SOURCE(S): MARPAT 124:120109

AB The dyes Z(G-E-A-N-MCN)_n (A = optionally halogenated alkylene; E = CO, SO₂; G = direct bond, imino; M = H, alkali or alk. earth metal, ammonium; Z = azo or other dye chromophore; n = 1-4) are obtained by treating a sulfate ester or vinyl sulfone precursor with cyanamide. The dyes are storage stable and suitable for textile dyeing or printing. Thus, C.I. Reactive Black 5 was treated with cyanamide to give a dye with 2 cyanamidoethylsulfonyl groups. The dye was used for single-phase printing of cellulose.

IT 173063-32-6P 173063-33-7P 173063-34-8P

173256-06-9P 173256-07-0P 173256-08-1P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(dyes with hydrolytically stable reactive groups)

L24 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1994:144163 HCAPLUS

DOCUMENT NUMBER: 120:144163

TITLE: Topical ophthalmic compositions comprising a combination of calcium antagonists with known antiglaucoma agents

INVENTOR(S): Desantis, Louis, Jr.

PATENT ASSIGNEE(S): Alcon Laboratories, Inc., USA

SOURCE: PCT Int. Appl., 20 PP.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 9323082      A1    19931125      WO 1993-US4505    19930512
W: AU, CA, JP
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
AU 9342467      A1    19931213      AU 1993-42467     19930512
EP 639986       A1    19950301      EP 1993-911276    19930512
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
JP 07508030     T2    19950907      JP 1993-503718    19930512
PRIORITY APPLN. INFO.:      US 1992-882328     19920513
                               WO 1993-US4505     19930512

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AB Calcium antagonists and compds. which lower intraocular pressure are combined in ophthalmic compns. to treat glaucoma. The calcium antagonists prevent or reduce the loss of visual field, while the intraocular pressure-lowering compds. maintain the intraocular pressure at normal levels.

IT 125651-31-2

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(calcium antagonist, ophthalmic compns. contg. intraocular pressure-lowering agents and, for glaucoma treatment)

L24 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1980:52415 HCAPLUS
DOCUMENT NUMBER: 92:52415
TITLE: Enkephalin analogs. Introduction of stereochemical constraints, **metal** binding sites and fluorescent groups
AUTHOR(S): Nagaraj, R.; Sudha, T. S.; Shivaji, S.; Balaram, P.
CORPORATE SOURCE: Mol. Biophys. Unit, Indian Inst. Sci., Bangalore, 560012, India
SOURCE: FEBS Letters (1979), 106(2), 271-4
CODEN: FEBLAL; ISSN: 0014-5793

DOCUMENT TYPE: Journal
LANGUAGE: English

AB A no. of enkephalin analogs were synthesized and evaluated as to biol. activity, with the latter being detd. from the recovery time for normal movement following injection of the peptides into the brain of mice. Activity was enhanced by replacement of the Gly2 or Gly2.cntdot.Gly3 residues with .alpha.-aminoisobutyryl residues, indicating that restriction of the available conformations at positions 2 and 3 would not necessarily decrease biol. activity. Analogs that were fluorescent or were capable of binding paramagnetic NMR shift probes are also described. Relations between biol. activity and the structural conformations of the analogs are discussed.

IT 72564-55-7

RL: BIOL (Biological study)
(behavior response to, structure in relation to)

L24 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1969:525974 HCAPLUS
DOCUMENT NUMBER: 71:125974
TITLE: Monoazonaphthol dyes for cotton
PATENT ASSIGNEE(S): Farbwerke Hoechst A.-G.
SOURCE: Fr. Addn., 21 pp. Addn. to Fr. 1447780
CODEN: FAXXA3

DOCUMENT TYPE: Patent
LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 91572		19680705		
PRIORITY APPLN. INFO.:		DE		19651224

GI For diagram(s), see printed CA Issue.
 AB The title compds. of general formula I where one of X, Y, and Z = NHCONHC6H4SO2R1-x (Q), or their Co, Cr, and Cu complexes are prep'd. by treating I (2 or 3), 5,7-H2N(HO)C10H5SO3H with x-R1O2SC6H4NCO (II), coupling with diazotized RNH2, and metallizing. In two alternative processes the acylation is made the final step or x-PhO2CNHC6H4SO2R1 may be used instead of II. The acylation is preferably carried out in H2O or a mixt. of H2O with C6H6, PhCl, or Me2CO at 0-50.degree. and neutral pH. I (R1 = CH2CH2SSO3H), are prep'd. by treating I (R = CH2CH2Cl or CH:CH2) with Na2S2O3. When applied to cotton the dyes are fast to washing. For example, a soln. of 23.9 parts 3,5,7-H2N(HO)C10H5SO3H in 200 parts H2O was stirred with 33% aq. NaOH to give pH 6-7, treated with a soln. of 35 parts II (X = 3, R1 = CH2CH2Cl) (III) in 100 parts PhCl at 40-50.degree., followed during 1 hr., by 200 parts H2O. On completion of the reaction PhCl was distd. in vacuo, the residue dild. to 500 parts with H2O and treated with a soln. of diazotized 30.3 parts 1,5,2-(HO3S)2C10H5NH2 to give I (R = 1,5,2-(HO3S)2C10H5, X = Q, x = 3, R1 = CH2CH2Cl, Y = Z = H) (Ia), which dyed fast yellowish red shades on cotton. The following I were prep'd. by analogous processes (R, X, Y, Z, x, R1, and shade on cotton given): 2-HO2CC6H4, Q, SO3H, H, 4, CH:CH2, red; 2,4,5-H-O3S(Me)(Cl)C6H2, Q, SO3H, H, 4, CH2CH2Cl, red; 4-HO3SC6H4, Q, H, H, 2, CH2CH2Cl, scarlet; 2,4,5-HO3S(Me)(Cl)C6H2, Q, SO3H, H, 3, CH2CH2OPh, scarlet; 1,5,2-(HO3S)2C10H5, Q, SO3H, H, 3, CH2CH2OAc, red. 2,5-(HO3S)2C6H3NH2 (253 parts) was diazotized and coupled with 2,5,7-(AcNH)(HO)C10H5SO3H in 2000 parts H2O and pH 6.5-7.0. NaOH liquor (940 parts) was added and the soln. was boiled under reflux for 4 hrs., adjusted to pH 6-7 with 37% aq. HCl, cooled to room temp., treated with a soln. of 500 parts III in 1200 parts PhCl at 40.degree., and after 12 hrs. PhCl distd. in vacuo. The residual soln. gave I [R = 2,5-(HO3S)2C6H3, X = Z = H, Y = Q, x = 3, R1 = CH2CH2Cl], orange on cotton. A soln. of 23.9 parts 2,5,7-(H2N)(HO)C10H5SO3H (IV) in 200 parts H2O contg. 33% aq. NaOH to give pH 6.5-7.0 was treated with 30 parts II (x = 3, R1 = CH:CH2) in 60 parts Me2CO, heated to 70-5.degree., treated with 26 parts Na2S2O3.5H2O (the pH held at 5.8-6.3 using HOAc during 3 hrs.) followed by 1000 parts H2O and the soln. salted to give 2,5,7-Q(HO)C10H5SO3H (x = 3, R1 = CH2CH2SSO3H) (V). 3-HO3SC6H4NH2 (17.3 parts) was diazotized and coupled with the moist cake of V to give I (R = 3-HO3SC6H4, X = Z = H, Y = Q, x = 3, R1 = CH2CH2SSO3H), orange on cotton. A mixt. of 60.4 parts 2,8,3,6-Q(HO)C10H4(SO3H)2 (VI, x = 4, R1 = CH:CH2) in 350 parts H2O was stirred with 14 parts Et2NH and 33% aq. NaOH at pH 10.5-11.0 for 4 hrs. and salted to give VI, (x = 4, R1 = CH2CH2NEt2) which was coupled with diazotized 17.3 parts 4-HO3SC6H4NH2 to give I (R = 4-HO3SC6H4, X = Q, Y = SO3H, Z = H, x = 4, R1 = CH2CH2NEt2), yellowish red on cotton. A neutral soln. of 478 parts 4-HO3SO-CH2CH2O2SC6H4NH2 in 3400 parts H2O was treated dropwise at pH 6-7 with 340 parts HCO2Ph to give 4-HO3SOCH2CH2SO2-C6H4NHCO2Ph (VII). A neutral soln. of 239 parts IV in 3000 parts H2O was stirred at 50-60.degree., treated with VII during 3 hrs. (pH 6.8-7.2 held with satd. aq. Na2CO3 soln.), stirred for 5 hrs. at 50-60.degree., cooled to room temp. and coupled with diazotized 1,5,2-(HO3S)2C10H5NH2 (303 parts) to give I (R = 1,5,2-(HO3S)2C10H5, X = Z = H, Y = Q, x = 4, R1 = CH2CH2OSO3H), orange on cotton. 2,5-HO(HO3S)C6H3NH2 (VIII) (18.9 parts) was diazotized and coupled with the product from 23.9 parts IV and 30 parts III. The product was stirred with 25 parts CuSO4.5H2O in 1000 parts H2O at 50-60.degree. and pH 5.0-5.5 (Na2CO3) for 4 hrs. to give the Cu complex of I [R = 2,5-HO(HO3S)C6H3, X = Z = H, Y = Q, x = 3, R1 = CH2CH2Cl], bluish red on cotton. 2-HO2CC6H4NH2 (13.7 parts) was diazotized and coupled with 50.7 parts 2,5,7-Q(HO)-C10H5SO3H (x = 3, R1 = CH2CH2Cl) (IX) at pH 6.5-7.0. Chrome alum (25 parts) was added and the soln. stirred at 95.degree. and pH 5-6 for 8 hrs. to give the Cr complex of I (R = 2-HO2CC6H4, X = Z = H, Y = Q, x = 3, R1 = CH2CH2Cl) brown on cotton. VIII (18.9 parts) was diazotized and coupled with 23.9 parts 2,8,6-H2N(HO)C10H5SO3H, the product treated with 14 parts CoSO4.7H2O and 30 parts III to give the Co complex of I [R = 2,5-HO(HO3S)C6H3, X = Q, Y =

Z = H, x = 3, R1 = CH₂CH₂Cl], bluish brown on cotton. Replacement of the CoSO₄·7H₂O by chrome alum gave the bluish violet Cr analog. 2,6,8-H₂NC₁₀H₅(SO₃H)₂ (30.3 parts) was diazotized and coupled with 50.7 parts IX the product oxidatively copperized to give the Cu complex of I [R = 1,6,8,2-HO(HO₃S)₂C₁₀H₄, X = Z = H, Y = Q, x = 3, R1 = CH₂CH₂Cl], violet on cotton. 2,4-(Me-O)(HO₃S)C₆H₃NH₂ (40.6 parts) was diazotized and coupled with the product from 47.8 parts 5,7,1-HO(HO₃S)C₁₀H₅NH₂ and 60 parts III to give I [R = 2,4-MeO(HO₃S)C₆H₃, X = Y = H, Z = Q, x = 3, R1 = CH₂CH₂Cl], red on cotton, Cu complex, violet, Ia (79.9 parts) was stirred in 1000 parts H₂O at pH 6.5-7.0 with 26 parts Na₂S₂O₃·5H₂O at 90-5.degree. for 3 hrs. to give the R1 = CH₂CH₂SSO₃H analog, yellowish red on cotton.

IT 24273-68-5P

RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of)

=> d stat que 136 nos

L3 STR
 L4 (293)SEA FILE=REGISTRY SSS FUL L3
 L5 STR
 L6 (4)SEA FILE=REGISTRY SUB=L4 SSS FUL L5
 L7 289 SEA FILE=REGISTRY ABB=ON PLU=ON L4 NOT L6
 L8 91 SEA FILE=HCAPLUS ABB=ON PLU=ON L7
 L9 1 SEA FILE=REGISTRY ABB=ON PLU=ON OLIGOETHER/BI
 L10 168 SEA FILE=REGISTRY ABB=ON PLU=ON POLYETHER/BI OR POLYETHERS/BI

 L11 1273885 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 OR L10 OR ?ETHER?
 L12 12 SEA FILE=HCAPLUS ABB=ON PLU=ON L11 AND L8
 L23 7 SEA FILE=HCAPLUS ABB=ON PLU=ON (L8 AND (ION OR METAL)) NOT
 L12
 L24 7 SEA FILE=HCAPLUS ABB=ON PLU=ON L23 NOT L12
 L25 288450 SEA FILE=REGISTRY ABB=ON PLU=ON NICKEL/BI
 L26 88162 SEA FILE=REGISTRY ABB=ON PLU=ON LITHIUM/BI
 L27 272500 SEA FILE=REGISTRY ABB=ON PLU=ON SODIUM/BI
 L28 105348 SEA FILE=REGISTRY ABB=ON PLU=ON POTASSIUM/BI
 L29 79953 SEA FILE=REGISTRY ABB=ON PLU=ON MAGNESIUM/BI
 L30 74829 SEA FILE=REGISTRY ABB=ON PLU=ON CALCIUM/BI
 L31 72931 SEA FILE=REGISTRY ABB=ON PLU=ON BARIUM/BI
 L32 56964 SEA FILE=REGISTRY ABB=ON PLU=ON STRONTIUM/BI
 L33 201079 SEA FILE=REGISTRY ABB=ON PLU=ON ALUMINUM/BI
 L34 4058032 SEA FILE=HCAPLUS ABB=ON PLU=ON L25 OR L26 OR L27 OR L28 OR
 L29 OR L30 OR L31 OR L32 OR L33 OR NICKEL OR LITHIUM OR SODIUM
 OR POTASSIUM OR MAGNESIUM OR CALCIUM OR BARIUM OR STRONTIUM OR
 ALUMINUM
 L35 36 SEA FILE=HCAPLUS ABB=ON PLU=ON L34 AND L8
 L36 26 SEA FILE=HCAPLUS ABB=ON PLU=ON L35 NOT (L12 OR L24)

=> d ibib abs hitrn 136 1-26

L36 ANSWER 1 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2003:335065 HCAPLUS

DOCUMENT NUMBER: 138:368620

TITLE: Preparation of 2-chloro-5-nitrobenzamides as lipid modulators for treatment of osteoporosis and diabetes

INVENTOR(S): Amemiya, Yoshiya; Wakabayashi, Kenji; Takaishi, Sachiko; Kitayama, Ken

PATENT ASSIGNEE(S): Sankyo Company, Limited, Japan

SOURCE: PCT Int. Appl., 221 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

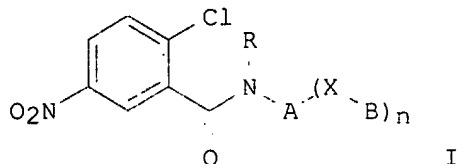
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003035602	A1	20030501	WO 2002-JP11068	20021024
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,				

NE, SN, TD, TG
 PRIORITY APPLN. INFO.:
 GI

JP 2001-327189 A 20011025



AB The title compds. I [wherein A = (un)substituted Ph, naphthyl, acenaphthenyl, Py, (iso)quinolyl, pyrimidyl, (benzo)furyl, pyranyl, chromanyl, (benzo)thienyl, pyrrolyl, (iso)indolyl, imidazolyl, pyrazolyl, pyridazinyl, pyrazinyl, (iso)oxazolyl, pyrrolidinyl, piperidyl, piperazyl, benzoxazolyl, benzoisoxazolyl, (iso)thiazolyl, benzothiazolyl, or biphenyl; B = (un)substituted aryl, cycloalkyl, or heterocyclyl; R = H or alkyl; X = a bond, O, S, CH₂, CO, NH, SO₂NH, NHSO₂, CONH, NHCO, or OCH₂; n = 0-1] and pharmaceutically acceptable salts thereof are prepd. as lipid modulators for treatment of osteoporosis and diabetes. For example, 4-phenylaniline hydrochloride was reacted with 2-chloro-5-nitrobenzoyl chloride in pyridine to afford N-(4-phenylphenyl)-2-chloro-5-nitrobenzamide. The above N-(4-phenylphenyl)-2-chloro-5-nitrobenzamide showed IC₅₀ of 1.9 nM against human PPAR .gamma.. I are useful for the treatment of osteoporosis, and diabetes, etc.

IT 518981-72-1P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (drug candidate; prepn. of chloro(nitro)benzamides as lipid modulators for treatment of osteoporosis and diabetes)

IT 518981-73-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (drug candidate; prepn. of chloro(nitro)benzamides as lipid modulators for treatment of osteoporosis and diabetes)

IT 824-78-2

RL: RCT (Reactant); RACT (Reactant or reagent)
 (prepn. of chloro(nitro)benzamides as lipid modulators for treatment of osteoporosis and diabetes)

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 2 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:918308 HCAPLUS

DOCUMENT NUMBER: 138:5591

TITLE: Cationic dyes bearing aminoethylsulfonylphenyl groups

INVENTOR(S): Hara, Koichi

PATENT ASSIGNEE(S): Nippon Chemical Works Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 2002348492	A2	20021204	JP 2001-155043	20010524
CN 1388183	A	20030101	CN 2002-120187	20020524
PRIORITY APPLN. INFO.:			JP 2001-155043	A 20010524

OTHER SOURCE(S): MARPAT 138:5591

AB The dyes are D[C₆H₂RaRb(SO₂C₂H₄NR₁aR₁b)]_n (D = azo, anthraquinone, phthalocyanine dye structure; Ra, Rb = H, halo, C1-3 alkyl, C1-3 alkoxy; R₁a, R₁b = H, C1-4 alkyl, C1-3 hydroxyalkyl, ZnR₂aR₂b; Z = C1-4 alkylene; R₂a, R₂b = H, C1-3 alkyl, C1-3 hydroxyalkyl; n = 1-3). Thus, 4-(.beta.-sulfatoethylsulfonyl)aniline was substituted with 2'-dimethylaminoethyl-2-dimethylaminoethylamine to give 4-[2-(2'-dimethylaminoethyl-2-dimethylaminoethylamino)ethylsulfonyl]aniline, which was diazotized, coupled with m-phenylenediamine-4-sulfonic acid, pptd. with NaCl, filtrated, and dried to give 2,4-diamino-5-[4-[2-(2'-dimethylaminoethyl-2-dimethylaminoethylamino)ethyl]sulfonyl]azobenzenesulfonic acid showing good light and moisture fastness.

IT 477284-34-7P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(manuf. of cationic dyes bearing aminoethylsulfonylphenyl groups)

IT 477284-35-8P 477284-36-9P 477284-37-0P

477284-40-5P 477284-42-7P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(manuf. of cationic dyes bearing aminoethylsulfonylphenyl groups)

IT 2580-78-1, C.I. Reactive Blue 19 40492-14-6

RL: RCT (Reactant); RACT (Reactant or reagent)

(manuf. of cationic dyes bearing aminoethylsulfonylphenyl groups)

L36 ANSWER 3 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:72049 HCAPLUS

DOCUMENT NUMBER: 136:134784

TITLE: Preparation of hydrocarbyl sulfone derivatives as inhibitors of activated blood coagulation factor X and process for their production

INVENTOR(S): Kubo, Keiji; Miyawaki, Toshio; Kawamura, Masaki

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 252 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002006234	A1	20020124	WO 2001-JP6148	20010717

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2001069531 A5 20020130 AU 2001-69531 20010717

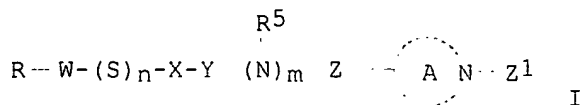
JP 2002201178 A2 20020716 JP 2001-216830 20010717

EP 1302462 A1 20030416 EP 2001-948032 20010717

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRIORITY APPLN. INFO.: JP 2000-221065 A 20000717

WO 2001-JP6148 W 20010717



AB Compds. represented by the general formula (I) or salts thereof [wherein R = (un)substituted cyclic hydrocarbonyl or heterocyclyl; W = a bond, (un)substituted divalent hydrocarbon chain; X = (un)substituted divalent hydrocarbon group; Y, Z = NR₆, CO, SO, SO₂, CH₂, NR₆CO, COCH₂, a bond; ring A = (un)substituted N-contg. heterocyclyl; R₅, R₆ = H, (un)substituted hydrocarbonyl, (un)substituted alkoxy, optionally esterified or amidated carboxyl, (un)substituted acyl; or R₅ is linked to the substituent of X or that of the ring A to form a ring; Z₁ = (un)substituted imido or N-contg. heterocyclyl; n = 0, 1, 2; m = 0, 1] or salts thereof, which inhibit activated blood coagulation factor X (no data), are prepd. These compds. are useful as anticoagulants for the treatment or prevention of myocardial infarction, cerebral thrombosis, deep venous thrombosis, pulmonary thromboembolism, or thromboembolism during or after surgery. Thus, a soln. of 3-[(6-chloro-2-naphthyl)sulfonyl]propanoic acid (prepn. given), 4-methylamino-1-(2-methyl-4-pyridyl)piperidine (prepn. given), DMTMM in THF was stirred at room temp. for 16 h to give 38% 3-[(6-chloro-2-naphthyl)sulfonyl]-N-methyl-N-[1-(2-methyl-4-pyridyl)-4-piperidinyl]propanamide (II). A capsule and tablet formulation contg. II were prepd.

IT **392328-93-7P**, N-[2-[(6-Chloro-2-naphthyl)sulfonyl]ethyl]-N'-methyl-N'-[1-(4-pyridyl)-4-piperidinyl]urea
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of hydrocarbyl sulfone derivs. as inhibitors of activated blood coagulation factor X and anticoagulants for therapeutic agents)

IT 194853-49-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

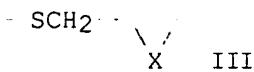
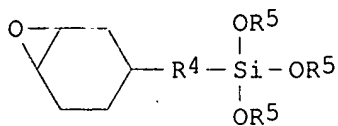
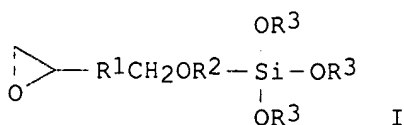
(prepn. of hydrocarbyl sulfone derivs. as inhibitors of activated blood coagulation factor X and anticoagulants for therapeutic agents)

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 4 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:511714 HCAPLUS
DOCUMENT NUMBER: 133:127459
TITLE: Hard coat composites for optical components
INVENTOR(S): Uchida, Naoki
PATENT ASSIGNEE(S): Ito Optical Industrial Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2000206305	A2	20000728	JP 1999-7123	19990114
PRIORITY APPLN. INFO.:			JP 1999-7123	19990114
GI				



AB The matrix of the hard coat comprises a hydrolyzate of an alkoxy silane deriv. having a component consisting of a trialkoxysilane contg. a mono-epoxy group I (R¹ = H, CH₃; R² = C1-4 alkylene; R³ = C1-4 alkyl) or II (R⁴ = C1-4 alkylene; R⁵ = C1-4 alkyl) having an auxiliary component (< 20%) comprising an alkoxy silane Si(OR₆)₄ (R₆ = C1-4 alkyl). The dispersants (av. particle diams. 1-50 nm) of the hard coat comprise the main component TiO₂, the auxiliary component SiO₂ and the minor components ZrO₂ and K₂O, where SiO₂/TiO₂ = 0.19-0.21; ZrO₂/TiO₂ = 0.0015-0.0023; K₂O/TiO₂ = 0.0012-0.012; and the dispersant/the matrix = 0.4-1. The hard coat is formed on an org. glass layer which comprises: a (co)polymer of .gtoreq.1 activated H-contg. compd. selected from polyol, polythiol and hydroxy compds. contg. mercapto group; or a (co)polymer of .gtoreq.1 episulfide comprising >2 of III (X = S, O; S > 50%) having a ring structure. Optionally, a primer layer is interposed between the hard coat and the org. glass layer. An antireflective layer may be formed on the hard coat.

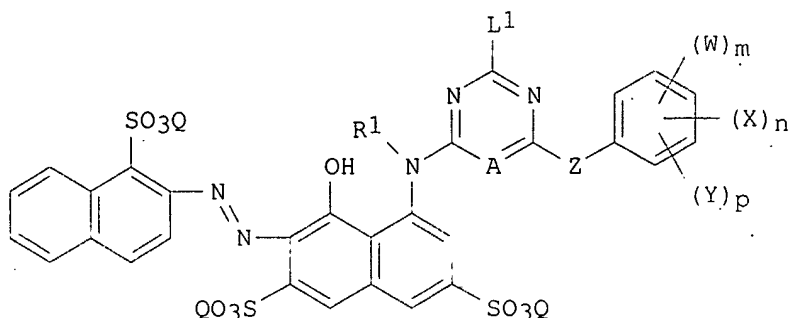
IT 12136-45-7, Potassium oxide (K₂O), uses
128603-98-5
RL: DEV (Device component use); USES (Uses)
(hard coat composites for optical components)

L36 ANSWER 5 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:48766 HCAPLUS
DOCUMENT NUMBER: 130:111502
TITLE: Monoazo dyes and inks containing them
INVENTOR(S): Kenworthy, Mark
PATENT ASSIGNEE(S): Zeneca Limited, UK
SOURCE: PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9901510	A1	19990114	WO 1998-GB1853	19980624
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
AU 9881218	A1	19990125	AU 1998-81218	19980624

EP 994924 A1 20000426 EP 1998-930942 19980624
 EP 994924 B1 20021023
 R: BE, CH, DE, FR, GB, IT, LI
 JP 2002508806 T2 20020319 JP 1999-506616 19980624
 CN 1105152 B 20030409 CN 1998-806666 19980624
 US 6344076 B1 20020205 US 1999-446972 19991230
 PRIORITY APPLN. INFO.: GB 1997-14010 A 19970703
 GB 1997-23007 A 19971101
 WO 1998-GB1853 W 19980624
 OTHER SOURCE(S): MARPAT 130:111502
 GI



I

- AB Monoazo dyes having general structure I [A = N, CCl, CCN, CNO₂; L₁ = OR₃; Z = O, S, NR₂; R₁, R₂ = H, (substituted) alkyl; R₃ = H, alkyl; W = CO₂Q, SO₃Q; X = (substituted) amino group, (substituted) amino group-contg. group; Y = substituent other than W and X; Q = (substituted) ammonium; m, n, p = 0-3; m + n + p = 0-5] are synthesized and used in jet-printing inks. Inks contg. the monoazo dyes, an ink-jet printing process using the inks, and cartridges and a substrate printed with the inks are also claimed.
- IT 7558-79-4, Phosphoric acid, disodium salt
 RL: TEM (Technical or engineered material use); USES (Uses)
 (jet-printing inks contg. monoazo dyes)
- IT 219636-33-6P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (monoazo dyes and jet-printing inks contg. them)
- IT 219636-34-7P 219636-35-8P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (prepn. of monoazo dyes for jet-printing inks)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 6 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1998:619019 HCAPLUS

DOCUMENT NUMBER: 129:218065

TITLE: Ink jet ink dyes based on ammonium containing cationic dyes having improved color migration and fading properties and dye manufacture

INVENTOR(S): Feeman, James Frederic; Sun, Jing Xiao

PATENT ASSIGNEE(S): Lexmark International Inc, USA

SOURCE: Brit. UK Pat. Appl., 48 pp.

CODEN: BAXXDU

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2315493	A1	19980204	GB 1997-14797	19970714
GB 2315493	B2	20010103		
GB 2346618	A1	20000816	GB 2000-10797	19970714
GB 2346618	B2	20010207		
US 5969112	A	19991019	US 1998-55007	19980403
US 5998590	A	19991207	US 1998-54606	19980403
US 6130319	A	20001010	US 1998-55008	19980403
PRIORITY APPLN. INFO.:			US 1996-690467	A 19960724
			GB 1997-14797	A3 19970714

OTHER SOURCE(S): MARPAT 129:218065

AB Phthalocyanine and azo dye derivs. modified with cationic groups are useful in jet inks. Thus, 0.01125 mol C.I. Reactive Red 180 was heated with 0.01125 mol diethanolamine at 50.degree. at pH 7.5 for 18 h and treated with di-Me sulfate to give the cationic dye, which was added (2%), with 2,2-thiodiethanol 15, 1,2-hexanediol 6, Proxel GXL 0.1%, and the balance H2O to give a jet ink for printing images with good lightfastness (72 h, Xenon Arc Fadometer).

IT 204976-41-0P 204976-43-2P 212209-69-3P
212209-71-7P 212209-73-9P 212209-75-1P
212209-77-3P 212209-79-5P 212209-81-9P
212209-83-1P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(ink jet ink dyes based on ammonium contg. cationic dyes having improved resistance to color migration and lightfastness)

IT 50662-99-2, C.I. Reactive Yellow 2 98114-32-0, C.I. Reactive Red 180

RL: RCT (Reactant); RACT (Reactant or reagent)

(ink jet ink dyes based on ammonium contg. cationic dyes having improved resistance to color migration and lightfastness)

IT 212209-67-1P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(ink jet ink dyes based on ammonium contg. cationic dyes having improved resistance to color migration and lightfastness and waterfastness)

L36 ANSWER 7 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1998:503148 HCAPLUS

DOCUMENT NUMBER: 129:217900

TITLE: Synthesis and properties of reactive dyes derived from sulforhodamine B

AUTHOR(S): Xu, Yingmei; Wu, Zuwang

CORPORATE SOURCE: State Key Laboratory of Fine Chemicals, Dalian University of Technology, Dalian, Zhongshan, 116012, Peop. Rep. China

SOURCE: Shikizai Kyokaishi (1998), 71(6), 353-361

CODEN: SKYOAO; ISSN: 0010-180X

PUBLISHER: Shikizai Kyokai

DOCUMENT TYPE: Journal

LANGUAGE: Japanese

AB A series of xanthene-type reactive dyes having dichlorotriazine or sulfoethylsulfonyl group was synthesized by chlorosulfonation and amination of Sulforhodamine B (C. I. Acid Red 52). Compared with Sulforhodamine B, absorption spectra for the solns. of the above reactive dyes showed bathochromic shifts, and bluish shades on silk fiber were obsd. The exhaustion and reaction ratios on silk were more than 88% and washing fastness was 4-5 grade. The structures of aminosulfo derivs. of Rhodamine were characterized by NMR and IR spectra and elemental anal.

IT 3520-42-1, Sulforhodamine B

RL: RCT (Reactant); RACT (Reactant or reagent)
(starting material; synthesis and properties of reactive dyes derived from sulforhodamine B)

IT 212319-76-1P 212395-73-8P

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(synthesis and properties of reactive dyes derived from sulforhodamine B)

L36 ANSWER 8 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1998:220856 HCAPLUS
DOCUMENT NUMBER: 128:271816
TITLE: Ink system with reduced bleed
INVENTOR(S): Feeman, James F.; Holloway, Ann P.; Zimmer, Agnes K.;
Sun, Jing X.; Franey, Terence E.; Mrvos, James M.;
Beach, Bradley L.
PATENT ASSIGNEE(S): Lexmark International, Inc., USA
SOURCE: U.S., 24 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5735941	A	19980407	US 1996-690468	19960724
GB 2315759	A1	19980211	GB 1997-15666	19970724
GB 2315759	B2	20000705		

PRIORITY APPLN. INFO.: US 1996-690468 A 19960724

OTHER SOURCE(S): MARPAT 128:271816

AB An ink system comprising a first ink contg. a flocculating dye in an aq. soln. and a second ink contg. a dispersant-pigment complex in an aq. soln. reduces bleed between the two inks when they are applied side by side, wherein the flocculating dye flocculates the dispersant-pigment complex. A first ink comprised Basic Yellow 45, 2,2'-thiodiethanol, 1,2-hexanediol, Proxel GXL, and deionized water, and a second ink comprised carbon black, methacrylic acid-monomethacryloyloxypropyl-terminated di-Me siloxane-stearyl methacrylate terpolymer, and deionized water.

IT 204976-23-8P 204976-25-0P 204976-27-2P
204976-29-4P 204976-31-8P 204976-33-0P
204976-35-2P 204976-37-4P 204976-39-6P
204976-41-0P 204976-43-2P 204976-45-4P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(ink system with reduced bleed)

IT 50662-99-2, C.I. Reactive Yellow 2 98114-32-0, C.I. Reactive Red 180

RL: RCT (Reactant); RACT (Reactant or reagent)
(ink system with reduced bleed)

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

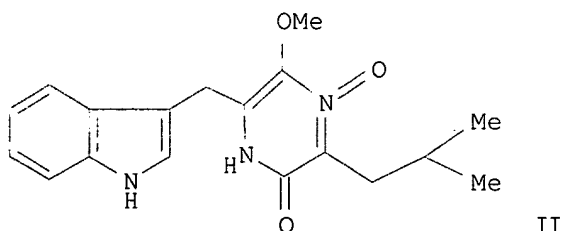
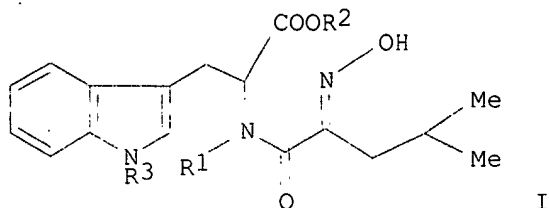
L36 ANSWER 9 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1995:846613 HCAPLUS
DOCUMENT NUMBER: 123:256434
TITLE: Preparation of NF 1616-904 and related compounds
INVENTOR(S): Matoba, Katsuhide; Tone, Hitoshi; Goto, Fumitaka;
Niihama, Koichi; Saka, Masayuki; Abe, Kaoru; Namikawa, Junichi; Tanaka, Tatsuyoshi; Nishi, Takao
PATENT ASSIGNEE(S): Otsuka Pharma Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 31 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07157481	A2	19950620	JP 1993-305561	19931206
JP 2742979	B2	19980422		

PRIORITY APPLN. INFO.: JP 1993-305561 19931206
 OTHER SOURCE(S): CASREACT 123:256434; MARPAT 123:256434
 GI



AB Indole derivs. I [R1 = cyanoalkyl, substituted phenylsulfonyl, etc.; R2 = H, alkyl, substituted phenylalkyl, etc.; R3 = H, alkoxy carbonyl, benzoyl, etc.] are cyclized, the products are O-methylated and then deprotected to give higher yields of the title compd. II. II-related compds. are also prepd. Thus, L-tryptophan Me ester hydrochloride in benzene contg. 4-MeC6H4SO3H was refluxed with 4-(dimethylamino)benzaldehyde for 4 h to give N-[(4-dimethylamino)benzyl]-L-tryptophan Me ester, which in DMF contg. K2CO3 was treated with 2-(2-cyanoethoxyimino)isocaproyl chloride at room temp. overnight to give N-[2-(2-cyanoethoxyimino)isocaproyl]-N-[(4-dimethylamino)benzyl]-L-tryptophan Me ester, which in DMF was treated with K2CO3 in H2O to give N-[4-(dimethylamino)benzyl]-N-(2-hydroxyiminoisocaproyl)-L-tryptophan, which was cyclized in the presence of dicyclohexylcarbodiimide and the product then hydrogenolyzed to give II.

IT 930-69-8 39689-37-7 168766-77-6
 168766-87-8

RL: RCT (Reactant); RACT (Reactant or reagent)
 (prepn. of NF 1616-904 and related compds.)

IT 168766-76-5P 168766-78-7P 168766-91-4P
 168766-92-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (prepn. of NF 1616-904 and related compds.)

L36 ANSWER 10 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1994:655452 HCAPLUS

DOCUMENT NUMBER: 121:255452

TITLE: .beta.-Tosylethylamine: A Useful Reagent for

Preparation of N-Protected Amides, Carbamates, and Related Compounds. Application to Synthesis of .beta.-Lactams

AUTHOR(S): DiPietro, Darren; Borzilleri, Robert M.; Weinreb, Steven M.

CORPORATE SOURCE: Department of Chemistry, Pennsylvania State University, University Park, PA, 16802, USA

SOURCE: Journal of Organic Chemistry (1994), 59(20), 5856-7
CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 121:255452

AB Readily prepd. .beta.-tosylethylamine can be used to synthesize N-tosylethyl (TSE)-protected amido compds. and .beta.-lactams, which can be deprotected under mild conditions with **potassium** tert-butoxide.

IT **158612-51-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and deprotection of tosylethyl-protected amides)

L36 ANSWER 11 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1994:485703 HCAPLUS

DOCUMENT NUMBER: 121:85703

TITLE: Silane-containing reactive dyes, their preparation and use

INVENTOR(S): Schrell, Andreas; Russ, Werner Hubert; Riehm, Thomas

PATENT ASSIGNEE(S): Hoechst A.-G., Germany

SOURCE: Eur. Pat. Appl., 37 pp.
CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 575744	A1	19931229	EP 1993-108001	19930517
R: BE, CH, DE, FR, GB, IT, LI, NL				
JP 06065518	A2	19940308	JP 1993-120106	19930521
PRIORITY APPLN. INFO.:			DE 1992-4217035	19920522

OTHER SOURCE(S): MARPAT 121:85703

AB The dyes, contg. .beta.-aminoethylsulfonyl or 6-aminotriazinylamino groups with the amino groups linked to alkoxy and(or) hydroxy group-contg. silyl substituents, are obtained for application to fibrous substrates with fixation at >95.degree.. Thus, 2,1,5-H₂NC₁₀H₅(SO₃H)₂ .fwdarw. 3-methyl-1-[4-(2-sulfatoethylsulfonyl)phenyl]-5-pyrazolone was condensed with H₂NCH₂CH₂NH(CH₂)₃Si(OMe)₃ to give a fast yellow dye for cotton.

IT **155687-25-5P 156735-23-8P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of, as blue dye for cotton)

IT **155687-26-6P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of, as yellow dye for cotton)

IT **20298-05-9**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with [(aminoethyl)amino]propyl]trimethoxysilane)

L36 ANSWER 12 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1990:631187 HCAPLUS

DOCUMENT NUMBER: 113:231187

TITLE: DNA-directed alkylating agents. 3.
Structure-activity relationships for acridine-linked

aniline mustards: consequences of varying the length of the linker chain

AUTHOR(S): Valu, Kisione K.; Gourdie, Trudi A.; Boritzki, Theodore J.; Gravatt, G. Lance; Baguley, Bruce C.; Wilson, William R.; Wakelin, Laurence P. G.; Woodgate, Paul D.; Denny, William A.

CORPORATE SOURCE: Sch. Med., Univ. Auckland, Auckland, N. Z.

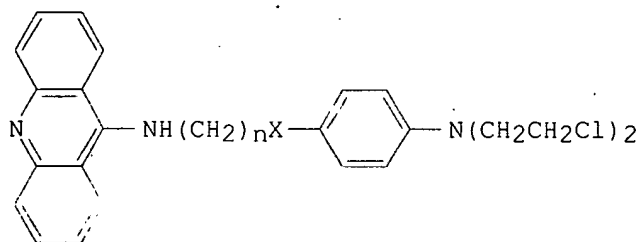
SOURCE: Journal of Medicinal Chemistry (1990), 33(11), 3014-19
CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 113:231187

GI



AB Four series of acridine-linked aniline mustards I ($X = CH_2, O, S, SO_2$; $n = 2-4$) have been prepd. and evaluated for in vitro cytotoxicity, in vivo antitumor activity and DNA crosslinking ability. Relationships were sought between chain length and biol. properties. Within each series, increasing chain length did not alter the reactivity of the alkylating moiety but did position it differently on the DNA, since crosslinking ability altered with chain length, being maximal with the C4 analog. The in vivo antitumor activities of the compds. depended to some extent on the reactivity of the mustard, with the least reactive SO_2 compds. being inactive. However, DNA-targeting did allow the use of less reactive mustards, since the S-linked acridine mustards showed significant activity whereas the parent S-mustard did not. Within each active series, the most active compd. was the C4 homologue, suggesting some relationship between activity and extent of DNA alkylation.

IT 130199-05-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and substitution reaction of, with methoxyacridine)

IT 130198-68-4P 130199-16-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn., cytotoxicity, antitumor activity, and DNA crosslinking by)

IT 13113-79-6, Sodium 4-nitrothiophenolate
RL: RCT (Reactant); RACT (Reactant or reagent)
(substitution by, of carbobenzyloxy chloride)

L36 ANSWER 13 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1990:120601 HCAPLUS

DOCUMENT NUMBER: 112:120601

TITLE: Water-soluble, monoazo dyes containing a ureido group and two sulfonyl fiber-reactive groups

INVENTOR(S): Thompson, Glenn A.; Corso, Anthony J.; Steuernagel, Hans H.

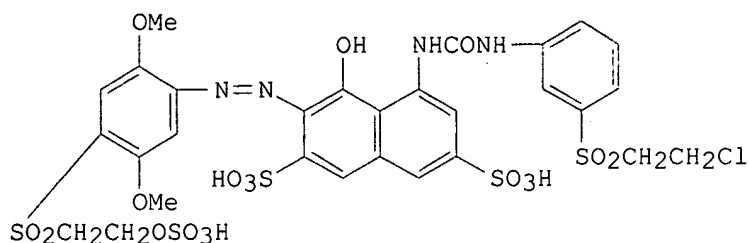
PATENT ASSIGNEE(S): Crall, Hugh C., USA; Hoechst Celanese Corp.

SOURCE: U.S., 14 pp.

DOCUMENT TYPE: CODEN: USXXAM
 LANGUAGE: Patent
 FAMILY ACC. NUM. COUNT: 1 English
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4855411	A	19890808	US 1988-170585	19880317
PRIORITY APPLN. INFO.:			US 1988-170585	19880317
OTHER SOURCE(S):			CASREACT 112:120601; MARPAT 112:120601	

GI



AB The title dyes XSO₂AN:NQN(R)CONHZSO₂Y [A, Q = (un)substituted phenylene or (un)substituted naphthalene residues; R = H, C1-4 alkyl, sulfonated lower alkyl; X, Y = CH:CH₂, CH₂CH₂SSO₃H, CH₂CH₂Br, CH₂CH₂OAc, CH₂CH₂OH, CH₂CH₂OPO₃H₂, CH₂CH₂OSO₂Me, CH₂CH₂OPh, CH₂CH₂OSO₃H, CH₂CH₂Cl, CH₂CH₂OSO₂Ph, CH₂CH₂N(R₁)R₂; R₁, R₂ = R; Z = (un)substituted Ph], which dye cellulosic fabrics in fast shades, are prepd. Thus, 1-amino-8-hydroxy-3,6-naphthalenedisulfonic acid mono Na salt was condensed with 3-(.beta.-chloroethylsulfonyl)phenyl-1-isocyanate, and the intermediate coupled with diazotized 1-amino-2,5-dimethoxyphenyl-4-(.beta.-sulfatoethylsulfone), producing I, which dyed cotton a fast violet shade. A soln. of I showed no chem. or phys. changes after 10 mo storage at pH .apprx.4.5.

IT 5460-09-3 40492-14-6
 RL: USES (Uses)
 (condensation of, with (chloroethylsulfonyl)phenylisocyanate)

IT 125679-24-5P
 RL: PREP (Preparation)
 (manuf. of, as reactive dye)

L36 ANSWER 14 OF 26 HCAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1986:592866 HCAPLUS
 DOCUMENT NUMBER: 105:192866
 TITLE: Water-soluble phthalocyanine compounds
 INVENTOR(S): Yamamura, Shigeo; Hirasawa, Yutaka
 PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 28 pp.
 CODEN: JKXXAF

DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

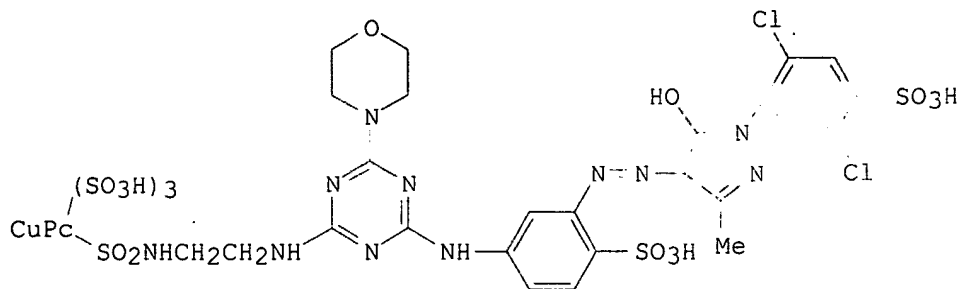
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61087759	A2	19860506	JP 1984-185451	19840906

JP 04011672
 PRIORITY APPLN. INFO.:
 GI

B4 19920302

JP 1984-185451

19840906



I

AB Water-sol. phthalocyanine (Pc) compds. useful for coloring glass were prepd. Thus, cyanuric chloride was condensed with 2,4-diaminobenzenesulfonic acid, diazotized, coupled with 1-(2,5-dichloro-4-sulfophenyl)-3-methyl-5-pyrazolone, and condensed with CuPc(SO₃H)₃SO₂NHCH₂CH₂NH₂ and then morpholine to give I. Toluene 69, 2-(dimethylamino)ethyl methacrylate 30, and AIBN 1 part were heated at 80.degree. for 5 h, and 50 parts of the resulting polymer soln. was treated with 15 parts (chloromethyl)styrene for 16 h, dissolved in 260 parts 2-ethoxyethanol, treated with 16 parts Irgacure 651, spin-coated 1 .mu. thick on a KBM 503-coated glass plate, and UV-cured. The coated glass was immersed in a 0.05% aq. I at pH 4 for 20 min to give a bright green optical glass.

IT 7429-90-5D, phthalocyanine complexes 104359-64-0D, aluminum complexes 104972-65-8 104972-69-2 104994-15-2 104994-16-3 104994-17-4 104994-18-5 105015-17-6 105015-18-7 105038-61-7 105038-63-9 105038-64-0

RL: TEM (Technical or engineered material use); USES (Uses)
 (dyes, for colored coatings for optical glass, manuf. of)

L36 ANSWER 15 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1984:419748 HCAPLUS

DOCUMENT NUMBER: 101:19748

TITLE: Immobilized polynucleotide phosphorylase. III.
 Formation of the enzyme-polynucleotide complex

AUTHOR(S): Liu, Nianjuan; Zhang, Yuying; Yang, Kaiyu

CORPORATE SOURCE: Inst. Microbiol., Acad. Sin., Beijing, Peop. Rep. China

SOURCE: Weishengwu Xuebao (1983), 24(1), 50-7

CODEN: WSHPA8; ISSN: 0001-6209

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

AB The polynucleotide synthesized by immobilized polynucleotide phosphorylase (PNPase) was bound with the enzyme during polymn., forming an enzyme-polynucleotide complex. The use of immobilized enzyme facilitates the isolation of the complex with the easy sepn. of immobilized enzyme from the reaction mixt. Anal. of polymn. products showed no intermediate oligonucleotides; only remaining substrates and polymers with a high mol. wt. were detected. Apparently, the polymn. process catalyzed by immobilized PNPase involves a processive mechanism. When immobilized PNPase was incubated with substrate (ADP, CDP, or IDP) at optimum pH 8-9

for a long time without addn. of divalent cations; polymn. did occur, and the synthesized polynucleotides were also bound with the enzyme mols. Under identical conditions no polymn. was detected with native PNPase. This difference might be due to either the presence of small amts. of divalent cation on the carrier of ABSE-agarose or an unusual property caused by immobilization. The presence of substrate (without addn. of Mg²⁺) remarkably enhanced the stability of immobilized enzyme. The immobilized PNPase was used >680 times. In addn. to the immobilization, the superior operation stability of immobilized PNPase is due to the substrate and polynucleotide protection. Divalent cation (Mg²⁺) and pH 8-9 also exhibited good effects on the stability of enzyme. Among all these factors, the polynucleotide bound with the enzyme during polymn. greatly contributed to the stability of immobilized PNPase. Probably, the ABSE-agarose carrier-enzyme-polynucleotide ternary complex provides the best conformation for the stability of the enzyme.

IT 7439-95-4, biological studies

RL: BIOL (Biological study)

(polynucleotide phosphorylase immobilized deriv. stabilization by)

IT 80111-44-0

RL: BIOL (Biological study)

(polynucleotide phosphorylase immobilized on, stabilization of, by polynucleotides and other compds.)

L36 ANSWER 16 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1984:53022 HCAPLUS

DOCUMENT NUMBER: 100:53022

TITLE: Physicochemical properties of fiber-reactive dyes for wool

AUTHOR(S): Stepanenko, V. O.; Romanova, M. G.

CORPORATE SOURCE: USSR

SOURCE: Khimicheskaya Promyshlennost (Moscow, Russian Federation) (1983), (11), 655-7
CODEN: KPRMAW; ISSN: 0023-110X

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB The covalent bonding of reactive dyes on wool increased from 71 to 89%, and the rate of unreacted dye trapping decreased from 7300-9400 to 2000/s, as the diffusion coeff. of the dyes increased from 1.7 .times. 10¹⁰ to 2.8 .times. 10¹⁰ cm²/s, depending on the hydrolytic stability of the reactive groups. The wet fastness of colors was adequate when covalent bonding was .gtoreq.75%, corresponding to a diffusion coeff. of .gtoreq.2 .times. 10¹⁰ cm²/s.

IT 4499-01-8 17804-49-8 70210-40-1

70224-86-1 70616-90-9 80419-51-8

86126-59-2 88640-53-3 88640-54-4

88640-55-5 88640-56-6 88640-57-7

88640-58-8 88640-59-9 88646-66-6

88646-67-7 88646-68-8

RL: USES (Uses)

(fixation of, on wool, color fastness and diffusion in relation to)

L36 ANSWER 17 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1981:104676 HCAPLUS

DOCUMENT NUMBER: 94:104676

TITLE: Sulfur-containing diisocyanates and their use in preparing polyurethanes

INVENTOR(S): Schwindt, Juergen; Groegler, Gerhard; Ganster, Otto; Koster, Johannes

PATENT ASSIGNEE(S): Bayer A.-G., Fed. Rep. Ger.

SOURCE: Ger. Offen., 48 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

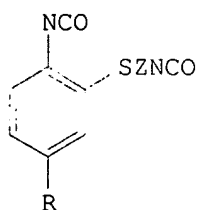
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2916135	A1	19801030	DE 1979-2916135	19790420
CA 1130304	A1	19820824	CA 1980-348518	19800326
US 4387057	A	19830607	US 1980-136624	19800402
EP 17883	A1	19801029	EP 1980-101845	19800405
EP 17883	B1	19811021		
R: AT, BE, CH, DE, FR, GB, IT, NL, SE				
AT 322	E	19811115	AT 1980-101845	19800405
AU 8057604	A1	19801023	AU 1980-57604	19800418
AU 532064	B2	19830915		
ES 490705	A1	19810416	ES 1980-490705	19800418
JP 56043259	A2	19810421	JP 1980-50545	19800418
ZA 8002321	A	19810930	ZA 1980-2321	19800418
PRIORITY APPLN. INFO.:			DE 1979-2916135	19790420
			EP 1980-101845	19800405

GI



AB The title isocyanates I (R = H, Br, Cl, alkylsulfonyl, alkoxy, or alkylthio, Z = C2 or higher alkylene or substituted or unsubstituted p-phenylene) are prepd. and used in the manuf. of rapid-curing urethane elastomers. Thus, 2,4'-diaminodiphenyl sulfide [6259-01-4] was prepd. by coupling Na o-aminothiophenoxide [52380-58-2] with 4-nitrochlorobenzene [100-00-5] and hydrogenating, and was phosgenated to give 2,4'-diisocyanatodiphenyl sulfide (I, R = H, Z = p-phenylene) (II) [75790-87-3]. A mixt. of 100 parts polypropylene glycol-polyoxypropylene triol prepolymer with NCO content 3.55% and 31.63 parts II was combined at 60.degree. with 10.82 parts 2-ethylhexyl 3,5-diamino-4-methylbenzoate, giving a compn. which remained castable for 1.5 min at 70.degree.. The compn. was poured into a mold preheated to 110.degree., could be removed after 1 min, and reached an acceptable strength level after 2 min. A control prepd. using 2,4-TDI instead of II required 3.5 min before removing and reached acceptable strength only after 7 min. Other phys. properties were comparable.

IT 76806-18-3P

RL: PREP (Preparation)

(manuf. of, for rapid-curing urethane elastomer synthesis)

IT 6976-04-1 52380-58-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with nitrochlorohydrocarbons)

L36 ANSWER 18 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1980:111156 HCAPLUS

DOCUMENT NUMBER: 92:111156

TITLE: N-Substituted triorganostannylhydrocarbylcarboxylic acid hydrazides

INVENTOR(S): Mao, Chung-Ling; Strunk, Richard J.; Hubbard, Winchester L.

PATENT ASSIGNEE(S): Uniroyal, Inc., USA

SOURCE: U.S., 18 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4178382	A	19791211	US 1978-917143	19780619
CA 1106362	A1	19810804	CA 1978-311093	19780912
ZA 7902472	A	19800625	ZA 1979-2472	19790521
EP 6693	A1	19800109	EP 1979-301051	19790604
R: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
BR 7903813	A	19800205	BR 1979-3813	19790615
IL 57578	A1	19821130	IL 1979-57578	19790617
JP 55002687	A2	19800110	JP 1979-76654	19790618
DD 144354	C	19801015	DD 1979-213695	19790618
ES 481677	A1	19800616	ES 1979-481677	19790619
AU 7948204	A1	19800103	AU 1979-48204	19790620

PRIORITY APPLN. INFO.: US 1978-917143 19780619

AB Approx. 150 R3SnXCONR1R2 (I, X = C1-5 alkylene, C8 aralkylene, R = C1-4 alkyl, C3-6 cycloalkyl, C6-10 aryl; R1 = H, C1-12 alkyl, C7-9 aralkyl, C2-12 alkanoyl, C7-11 aroyl, C1-12 substituted alkyl; R2 = NR3R4, N:CR5R6, NR7COR8, NR9CYNR10R11; Y = O, S; R - R11 = H, substituted alkyl, cycloalkyl, aryl, etc.) were prepd., e.g., by the reaction of R3SnXCONHNNH2 with R5R6CO. Thus, 0.016 mol Me3SnCH2CH2CONHNNH2 and 0.068 mol Me2CO gave 3.8g Me3SnCH2CH2CONHN:CMc2 (II). I were pesticides. Thus, II at 1000 ppm gave 100% kill of aphids, at 500 ppm 100% kill of mites, and at 1000 ppm gave 80% kill of the cotton boll weevil.

IT 72958-46-4P 72958-77-1P 72959-14-9P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. and pesticidal activity of)

L36 ANSWER 19 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1973:85938 HCAPLUS
 DOCUMENT NUMBER: 78:85938
 TITLE: Aromatic amine dye intermediates
 INVENTOR(S): Yamaya, Wataru; Inoue, Shozo
 PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Co., Ltd.
 SOURCE: Jpn. Tokkyo Koho, 5 pp.
 CODEN: JAXXAD
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 47037413	B4	19720920	JP 1966-29344	19631209

AB Arom. amines contg. a sulfonyl group were prepd. Thus, a mixt. of p-AcNHC6H4SO2Na and PhNMeCH2CH2Cl was refluxed in EtOH to give sulfone intermediate I (X = p-AcNH, n = O) [37710-59-1]. In another example, sulfonamide intermediate I (X = AcNH, n = 1, R = H) [37710-60-4] was prepd. from PhNEtCH2CH2NH2 and p-AcNHC6H4SO2Cl. Also prepd. were I (X = p-AcNH, n = 1, R = Me) and I [X = 2,5-Me(O2N), n = 1, R = Me].

IT 37710-59-1P

RL: IMF (Industrial manufacture); PREP (Preparation) (prepn. of)

IT 6034-54-4

RL: USES (Uses)

(reaction with (chloroethyl)ethylphenylamine)

L36 ANSWER 20 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1973:83960 HCAPLUS
 DOCUMENT NUMBER: 78:83960
 TITLE: p-Isothiocyanatophenyl 2-substituted-ethyl sulfides and sulfones
 AUTHOR(S): Uher, M.; Jendrichovsky, J.
 CORPORATE SOURCE: Slov. Vys. Sk. Tech., Bratislava, Czech.
 SOURCE: Collection of Czechoslovak Chemical Communications (1973), 38(1), 289-93
 CODEN: CCCCCA; ISSN: 0010-0765
 DOCUMENT TYPE: Journal
 LANGUAGE: German

AB p-SCNC6H4SCH2CH2R (R = OH, Cl, iodo, -NCS, NEt2) and p-(SCN)C6H4SO2CH2CH2R (R = OH, Cl, Br, iodo, NEt2, -NCS, -SCN) were prepd. by treating the corresponding p-substituted anilines or aniline hydrochlorides with C(S)Cl2; their ir and uv spectra were discussed. p-AcNHC6H4SO2Cl in EtOH treated with Zn amalgam (prepd. from Zn and HgCl2) and concd. HCl gave p-AcNHC6H4SH. A mixt. of p-AcNHC6H4SCH2CH2O3SC6H4Me-p, Me2CO, and NaI was refluxed 3 hr to give p-AcNHC6H4SCH2CH2I.

IT 1021-56-3P 40330-87-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

L36 ANSWER 21 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1973:5402 HCAPLUS
 DOCUMENT NUMBER: 78:5402
 TITLE: Fiber-reactive azo and anthraquinone dyes
 INVENTOR(S): Berner, Klaus; Hoyer, Ernst; Sommer, Karl
 PATENT ASSIGNEE(S): Farbwerke Hoechst A.-G.
 SOURCE: Ger. Offen., 58 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2106648	A	19720824	DE 1971-2106648	19710212
DE 2106648	B2	19791011		
DE 2106648	C3	19800626		

PRIORITY APPLN. INFO.: DE 1971-2106648 19710212

AB Fifteen water-sol. dyes, R[SO2CH2CH2N(CH2CH2OSO3M)2]n (n = 1 or 2; M = H, K, or Na, R = azo or anthraquinone dye residue free of water-solubilizing groups), were prepd. starting from H2NQSO2CH:CH2 (Q = arylene) and used for dyeing and printing, e.g. silk, wool, polyamide, and cotton-polyester. Thus, a mixt. of 4,2,5-H2N(MeO)2C6H2SO2CH:CH2 and (HOCH2CH2)2NH was heated 3 hr at 100.deg., the mixt. dissolved in pyridine, H2NSO3H added, the mixt. heated 30 min at 100-5.deg., diazotized, coupled with 3-methyl-1-phenyl-5-pyrazolone, and salted to give fiber-reactive dye I [37114-73-1], dyeing wool a level, wetfast yellow shade.

IT 37114-73-1P 40082-31-3P 40082-36-8P
 40082-39-1P 40082-41-5P 40082-43-7P
 40082-46-0P 40082-48-2P 40082-49-3P
 40082-52-8P 40082-54-0P 40082-82-4P
 40144-28-3P 40144-30-7P

RL: IMF (Industrial manufacture); PREP (Preparation)
 (prepn. of)

L36 ANSWER 22 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1971:100614 HCAPLUS

DOCUMENT NUMBER: 74:100614
 TITLE: 1-(Alkylsulfonylphenyl)-5-phenyl-3-styryl-2-pyrazolines as fluorescent whitening agents
 INVENTOR(S): Mengler, Helmut; Roesch, Guenter; Schinzel, Erich; Smerz, Otto
 PATENT ASSIGNEE(S): Farbwerke Hoechst A.-G.
 SOURCE: Ger. Offen., 25 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 1923702	A	19701119	DE 1969-1923702	19690509

PRIORITY APPLN. INFO.: DE 1969-1923702 19690509

GI For diagram(s), see printed CA Issue.

AB The title compds. (I, R1 = CH2CH2X, X = SO3Na, OR3, NHR4, or NR52) were prepd. from (4-RC6H4CH:CH)2CO (II) and p-H2NNHC6H4SO2CH2CH2OH (III) via I (R1 = CH2CH2OH), dehydration to I (R1 = CH:CH2), and addn. of active H compds. Mixts. of I and IV, used as fluorescent whitening agents for polyamide, polyacrylonitrile, and cellulose textiles, were more effective than the single compds. Thus, refluxing II (R = H) with III in EtOH and HCl gave 90% I (R = H, R1 = CH2CH2OH), which on reaction with H2SO4 and KCl gave I (R = H, R1 = CH2CH2OSO3K) which in aq. Me2CO was treated with NaOH to give I (R = H, R1 = CH:CH2) (V). I (R = H, R1 = CH2CH2OCHMeCH2NMe2) was prepd. from V by adding HOCHMeCH2NMe2. Similarly were prepd. 8 other I (R = H) and 9 I (R = Cl).

IT 29244-86-8P 29244-96-0P 29244-97-1P
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (prepn. of)

L36 ANSWER 23 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1970:478560 HCAPLUS

DOCUMENT NUMBER: 73:78560

TITLE: Styrylpyrazolines as fluorescent whitening agents

PATENT ASSIGNEE(S): Farbwerke Hoechst A.-G.

SOURCE: Fr. Demande, 18 pp.
 CODEN: FRXXBL

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2006587	A5	19691226	FR 1969-12412	19690421

PRIORITY APPLN. INFO.: CH 1968-5801 A 19680419

GI For diagram(s), see printed CA Issue.

AB The title compds. (I) are prepd. by condensing (4-RC6H4CH:CH)2CO (II) with 4-H2NNHC6H4SO2CH2CH2OH (III), transforming the products to the -SO2CH2CH2OSO3H and (or) SO2CH:CH2 derivs. and reacting with R'H (alcs., amines, amides). I are used on polyamide, cellulose, and polyacrylonitrile fabrics. Thus, II (R = H) was condensed with III in acid soln. to give I (R = H, R1 = OH), which was sulfated, converted to the vinyl sulfone, and treated with Na2SO3 to give I (R = H, R' = SO3Na). Similarly 21 other I were prepd.

IT 29244-86-8P 29244-96-0P 29244-97-1P
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (prepn. of)

L36 ANSWER 24 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1966:429899 HCAPLUS
 DOCUMENT NUMBER: 65:29899
 ORIGINAL REFERENCE NO.: 65:5563h, 5564a-g
 TITLE: Metallized azo dyes
 PATENT ASSIGNEE(S): Farbwerke Hoechst A.-G
 SOURCE: 39 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
NL 65012362		19660325	NL	

PRIORITY APPLN. INFO.: DE 19640924
 AB The prepn. is described of azo dyes contg. XCH₂CH₂SO₂C₆H₄NHCONH groups, where X = Cl, Ac, OSO₃H, and S₂O₃H. 1,8,3,6-HO(H₂N)C₁₀H₄(SO₃H)₂ (II) (223 parts) in 700 vols. H₂O neutralized with Na₂CO₃, and treated at 0-5.degree. and pH 6.5-7 during 1 hr. with stirring with 206.5 parts m-ClCH₂CH₂SO₂C₆H₄NCO (III) (m. 81.degree.) in 415 parts Me₂CO yielded 1,8,3,6-HO(m-ClCH₂CH₂SO₂C₆H₄NHCONH)C₁₀H₄(SO₃H)₂ (IV). IV (56.5 parts) in 1000 parts H₂O coupled with 9.3 parts diazotized PhNH₂ (V) yielded V .fwdarw. IV, dark red, H₂O-sol. powder which dyes wool and polyamide fibers from an acid bath red shades of good light- and washfastness. 1,8,4,6-H₂N(HO)C₁₀H₄(SO₃H)₂ (15.95 parts) treated with 12.5 parts powd. p-CH₂:CHSO₂C₆H₄NCO (VI) (m. 61.degree.) and diazotized 8.65 parts p-HO₃SC₆H₄NH₂ (VII) yielded VII .fwdarw. 1,8,3,5-HO(p-CH₂:CHSO₂C₆H₄NHCONH)C₁₀H₄(SO₃H)₂, a red powder, bright red on cotton. Similarly, 16.0 parts II, 19 parts o-ClCH₂CH₂SO₂C₆H₄NCO (VIII), and diazotized 4.66 parts V yielded V .fwdarw. 1,8,3,6-HO(o-ClCH₂CH₂SO₂C₆H₄NHCONH)C₁₀H₄(SO₃H)₂, a dark red powder; it dyes bluish red shades. II (16.0 parts) with 15 parts p-isomer of III (m. 100.degree.) and diazotized 6.9 parts o-HO₂CC₆H₄NH₂ (IX) yielded the bluish red dye IX .fwdarw. 1,8,3,6-HO(p-ClCH₂CH₂SO₂C₆H₄NHCONH)C₁₀H₄(SO₃H)₂. II (16.0 parts) condensed with 30 parts p-HO₃SOCH₂CH₂C₆H₄NHCO₂Ph, and the resulting 1,8,3,6-HO(p-HO₃SOCH₂CH₂C₆H₄NHCONH)C₁₀H₄(SO₃H)₂ (X) coupled with diazotized 11.1 parts 2,1-H₂NC₁₀H₆SO₃H (XI) gave brilliant blue XI .fwdarw. X. II condensed with an equiv. amt. of ClCO₂Ph at 55-60.degree. and pH 7.0-7.3 and an equiv. amt. of p-HO₃SOCH₂CH₂C₆H₄NH₂ also yielded X. II (16.0 parts) with 13 parts m-CH₂:CHSO₂C₆H₄NCO (m. 46.degree.) and 13.2 parts diazotized 4,3-H₂N(HO₃S)C₆H₃NHPh (XII) yielded blue XII .fwdarw. 1,8,3,6-HO(m-CH₂:CHSO₂C₆H₄NHCONH)C₁₀H₄(SO₃H)₂. II (12.8 parts) treated with 15 parts m-PhOCH₂CH₂SO₂C₆H₄NCO (m. 87.degree.) and 6.9 parts diazotized p-HO₃SC₆H₄NH₂ (XIII) yielded red XIII .fwdarw. 1,8,3,6-HO(m-PhOCH₂CH₂SO₂C₆H₄NHCONH)C₁₀H₄(SO₃H)₂. 6,1,4,2-Cl(HO)(HO₃S)C₆H₂NH₂ (XIV) (11.2 parts) diazotized and coupled with 28 parts IV, and the product metallized at 40.degree. and pH 4.5-5.5 during about 2 hrs. in 500 parts H₂O with 12.5 parts CuSO₄.5H₂O gave the violet Cu complex of XIV .fwdarw. IV (Ni complex, red-violet). II 31.9, VI 26, and diazotized 2,5-HO(O₂N)C₆H₃NH₂ (XV) 15.4 parts yielded XV .fwdarw. 1,8,3,6-HO(p-CH₂:CHSO₂C₆H₄NHCONH)C₁₀H₄(SO₃H)₂ which with 25.0 parts KCr(SO₄)₂.12H₂O gave the blue-gray Cr complex. 1,8,6-H₂N(HO)C₁₀H₅SO₃H 11.96, III 15, and diazotized 3,5,7,1-(HO₃S)₃C₁₀H₄NH₂ (XVI) 19 parts yielded red-violet XVI .fwdarw. 1,8,3-HO(m-ClCH₂CH₂SO₂C₆H₄NHCONH)C₁₀H₅SO₃H . 1,8,3-H₂N(HO)C₁₀H₅SO₃H 11.96, III 20, and diazotized 4,8,2(HO₂S)₂C₁₀H₅NH₂ (XVII) 15.1 parts yielded bluish brown XVII .fwdarw. 1,8,7-HO(m-ClCH₂CH₂SO₂C₆H₄NHCONH)C₁₀H₅SO₃H. 2,5-(HO₃S)₂C₆H₃NH₂ (25.3 parts) diazotized and coupled with 13.7 parts 3,4-H₂N(MeO)C₆H₃Me, and the resulting 2,6,4-Me(MeO)-[2,5-(HO₃S)₂C₆H₃N:N]C₆H₂NH₂ (XVIII) diazotized and coupled with 56.5 parts III gave navy-blue XVIII .fwdarw. IV. m-HO₃SC₆H₄NH₂ .fwdarw. IV (37.5 parts) with 22.5 parts CuSO₄.H₂O and 11.3 parts 35% H₂O₂ gave the red-violet Cu complex. p-HO₃SC₆H₄NH₂ diazotized and coupled with II, and the product condensed with III yielded bluish red

p-HO₃SC₆H₄NH₂ .fwdarw. IV. 1,8,3,6-HO(EtNH)C₁₀H₄(SO₃H)₂ 34.7, III 40, and diazotized V 9.3 parts yielded bright red V .fwdarw. 1,8,3,6-HO(m-ClCH₂CH₂SO₂C₆H₄NHCONEt)C₁₀H₄(SO₃H)₂. 2,5-HO(HO₃S)C₆H₃NH₂ (XIX) (18.9 parts) diazotized and coupled with 31.9 parts II, the resulting XIX .fwdarw. II metallized with CoSO₄.6H₂O, and the resulting Co complex condensed with 30 parts III yielded the navy-blue Co complex of XIX .fwdarw. IV. 1,8,3,6-HO(p-CH₂:CHSO₂C₆H₄NHCONH)C₁₀H₄(SO₃H)₂ (XX) (52.9 parts) coupled with 9.3 parts diazotized V yielded red V .fwdarw. XX. XX coupled with diazotized VII gave similarly red VII .fwdarw. XX. IV from 319 parts II and 296 parts III coupled with 303 parts diazotized 1,5,2-(HO₃S)₂C₁₀H₅NH₂ (XXI) gave brilliant bluish red XXI .fwdarw. IV. A similar dye was obtained using 335 parts m-AcOCH₂CH₂SO₂C₆H₄NCO (XXII) instead of III. A similar run with 6,8,2-(HO₃S)₂C₁₀H₅NH₂ (XXIII) gave bluish red XXIII .fwdarw. IV. XXIII .fwdarw. IV 44 with CuSO₄.5H₂O 22.5, and 35% H₂O₂ 11.3 parts gave the blue Cu complex. II (319 parts) condensed with 335 parts XXII, and the product coupled with 93 parts diazotized V yielded brilliant red V .fwdarw. 1,8,3,6-HO(m-AcOCH₂CH₂SO₂C₆H₄NHCONH)C₁₀H₄(SO₃H)₂. X coupled with diazotized XXI gave bluish red XXI .fwdarw. X. IV from 159.5 parts II and 148 parts III treated in H₂O with 121 parts 33% aq. NaOH at 10-15.degree. and then heated 3 hrs. at 70-5.degree. with 130 parts Na₂S₂O₃.5H₂O, and the resulting 1,8,3,6-HO(m-NaO₃SSC₆H₄NHCONH)C₁₀H₄(SO₃H)₂ (XXIII) coupled with diazotized 111.5 parts XI yielded bluish red XI .fwdarw. XXIII. Similarly was prepd. bluish red 1,5,2-(HO₃S)₂C₁₀H₅NH₂ .fwdarw. XXIII. 2,4-HO₂C(HO₃S)C₆H₃NH₂ (XXV) (217 parts) diazotized and coupled with IV from 319 parts II and 296 parts III gave brilliant red XXV .fwdarw. IV (Cu complex, red-violet; Cr complex, blue-violet). 2,5-(HO₃S)₂C₆H₃NH₂ .fwdarw. 5,2-Me(HO)C₆H₃NH₂ .fwdarw. IV 98, H₂O 650, AcONa 30, AcOH 32, and CuSO₄.5H₂O 43 parts refluxed about 10 hrs. with stirring yielded the blue Cu complex.

IT 6434-50-0, Benzoic acid, o-[[[8-[3-[p-[(2-chloroethyl)sulfonyl]phenyl]ureido]-1-hydroxy-3,6-disulfo-2-naphthyl]azo]-, trisodium salt 6730-50-3, 2,7-Naphthalenedisulfonic acid, 5-[3-[p-[[2-(diethylamino)ethyl]sulfonyl]phenyl]ureido]-4-hydroxy-3-[(p-sulfophenyl)azo]- (prepn. of)

L36 ANSWER 25 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1966:67255 HCAPLUS
DOCUMENT NUMBER: 64:67255
ORIGINAL REFERENCE NO.: 64:12537b-c
TITLE: Researches on organophosphorus insecticides. VIII. The preparations and chemical reactions of sodium salts of O-ethyl N,N-diethylphosphoramido mono (or di)-thioacids
AUTHOR(S): Yang, Shih-Hsien; Chen, Tien-Chih; Wang, Chin-Sun; Chin, Kuei-Yu; Shao, Shu-Lien; Liu, Lun-Tsu
CORPORATE SOURCE: Nankai Univ., Tientsin, Peop. Rep. China
SOURCE: Huaxue Xuebao (1965), 31(5), 406-11
CODEN: HHHPA4; ISSN: 0567-7351
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB cf. CA 64, 11240h. The prepn. and chem. properties of the Na salts of O-ethyl N,N-diethylphosphoramido mono(or di)-thioacids (I and II) were reported. I or II reacted with alkyl halides to give the corresponding alkyl esters. By acidifying with dil. HCl, I and II were converted into their corresponding acids, which, on treatment with alkyl iodide in the presence of org. bases, diazomethane, and cyclohexylamine, were transformed into the corresponding alkyl esters, methyl ester, and amide salts, resp. Reaction of II with Br or iodine gave [(EtO)(Et₂N)P(S)S]₂, which was transformed into (EtO)(Et₂N)P(S)Cl by reacting with chlorine.
IT 5755-88-4, Acetanilide, 4'-[[2-[(2-mercaptoethyl)amino]ethyl]sulfonyl]-, sulfate (ester) 5851-15-0, Phosphoramidothioic acid,

diethyl-, O-ethyl ester, Na salt 5851-16-1,
Phosphoramidodithioic acid, diethyl-, O-ethyl ester, Na salt
(prepn. of)

L36 ANSWER 26 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1964:10158 HCAPLUS
DOCUMENT NUMBER: 60:10158
ORIGINAL REFERENCE NO.: 60:1870d-h,1871a
TITLE: Water-soluble dyes containing hydroxy alkyl groups
INVENTOR(S): Heslop, Robert N.; Waite, Frederick A.
PATENT ASSIGNEE(S): Imperial Chemical Industries Ltd.
SOURCE: 9 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 927404		19630529	GB	19591120

AB (Throughout this abstr. Pc represents a phthalocyanine residue.) Azo, anthraquinone, and phthalocyanine dyes contg. .gtoreq.1 SO₃H group and an alkyl group contg. .gtoreq.2 OH groups applied to cellulose in conjunction with HCHO and (or) a resin-forming intermediate and an acid-liberating catalyst yield dyed, crease-resistant fabrics with excellent washfastness. Thus, a soln. of the di-Na salt of 1-amino-4-[3'-(.beta.-sulfatoethylsulfonyl)anilino]anthraquinone-2-sulfonic acid (I) 20 and HOCH₂CH(OH)CH₂NH₂ (II) 26 in H₂O 500 parts is stirred 4 hrs. at 50.degree. and filtered at 20.degree.. Addn. of NaCl 125 to the filtrate ppts. a dye, which is stirred with 15% NaCl 100 parts, filtered, and washed with 15% NaCl. A soln. contg. the dye 1, melamine-HCHO precondensate 10, NH₄SCN 1, and nonionic wetting agent 0.2% padded on cotton (100% pickup), dried at 70.degree., baked 3 min. at 150.degree., washed, etc., yields a bright reddish blue fabric. Other dyes are prepd. similarly (reactants and shade of the product on cellulose given): I, N-methylglucamine (III), reddish blue; tri-Na 1-amino-4-[4'-(.beta.-chloropropionamido)anilino]anthraquinone-2,3',5-trisulfonate, II, greenish blue; di-Na 1-amino-4-[4'-(N-methyl-.beta.-chloropropionamido)anilino]anthraquinone-2,3'-disulfonate, H, reddish blue; di-Na bis(.beta.-chloroethylsulfamoyl)-1,4-bis [4 - (2 - methoxyphenoxy)anilino]anthraquinonedisulfonate, III, green; di-Na salt of 1-amino-4-[4'-methyl-3'-(.beta.-sulfatoethylsulfonyl)methyl]anilino]anthraquinone-2-sulfonic acid, III, blue; di-Na 1-amino-4-[3'-(chloroacetamido)anilino]anthraquinone-2,4'-disulfonate, III, reddish blue; di-Na 1-amino-4-[4'-(2-chloro-N-methylacetamido)anilino]anthraquinone-2,3'-disulfonate, III, -; di-Na 1-amino-4-[4'-(2-chloro - N-ethylacetamido)anilino]anthraquinone - 2,3' - disulfonate, III, -; di-K salt of 1-amino-4-3'-(.beta.-sulfatoethylsulfamoyl)-anilino]anthraquinone-2-sulfonic acid, III, reddish blue; di-K salt of 1-amino-4-[.beta.-[.alpha.-(.beta.-sulfatoethyl)ethylsulfamoyl]anilino]-anthraquinone-2-sulfonic acid, III, -; di-K salt of 1-amino-4-[3'-[N - (.degree. - sulfatoethyl)-N-methylsulfamoyl] anilino] anthraquinone-2-sulfonic acid, III, -; Cu 3-Pe[SO₂NHC₆H₄(SO₂CH₂CH₂O-SO₃K)-3]SO₃K, III, bright greenish blue; Cu 3-Pc[SO₂NHC₆H₃-(SO₂CH₂CH₂OSO₃K)Me-3,4]SO₂K, III, -; Cu 3-Pc(SO₂NH-CH₂CH₂Cl)(SO₂NH₂)SO₃H (IV), III, bright greenish blue; Cu-Pc(SO₂NHCH₂CH₂Cl)SO₃H (V), III, -; Cu 3-PcSO₂N(Me)-CH₂CH₂Cl)SO₃H (VI), III, -; Cu 3-Pc[SO₂N(Et)CH₂CH₂Cl]-SO₃H (VII), III, -; IV, N-ethylglucamine (VIII), -; V, VIII, -; VI, VIII, -; VII, VIII, -; IV, N-(.degree.-hydroxyethyl)gluca-mine (IX), -; V, IX, -; VI, IX, -; VII, IX, -; IV, glucosamine (X), -; V, X, -; VI, X, -; VII, X, -; Cu 4-PcSO₂N-(Me)CH₂(CHOH)4CH₂OH(SO₂NHCH₂CH₂Cl)SO₃H, III, -; Cu 4-Pe(SO₂NHCH₂CH₂OH)(SO₂NHCH₂CH₂Cl)SO₃H, III, -; Cu 4-Pc(SO₂NHCH₂CH₂Cl)SO₃H, III, -; Cu 4-Pc(SO₂NHCH₂CHOHCH₂Cl)(SO₃NH)SO₃H, III, -; tri-Na salt of the Cu complex of

8-acetamido-2-[2-hydroxy-5-(.degree.sulfatoethylsulfonyl)phenylazo]-1-hydroxy-3,6-naphthalenedisulfonic acid, III, red-violet. Coupling 4-H₂NC₆H₄COCH₂N(Me)CH₂(CHOH)4CH₂OH to 1-(3-sulfophenyl)-3-methyl-5-pyrazolone (XI) yields a dye, yellow on cellulose. Also yellow on cellulose are 4-H₂NC₆H₄SO₂N(Me)[CH₂CH₂N(Me)CH₂(CHOH)4CH₂OH] .fwdarw. XI and 4-H₂NC₆H₄N(Et)COCH₂N(Me)CH₂(CHOH)4CH₂OH .fwdarw. XI.

IT 101058-41-7, 2-Anthracenesulfonic acid, 1-amino-4-[4-[3-[(2,3-dihydroxypropyl)amino]-N-methylpropionamido]-3-sulfoanilino]-9,10-dihydro-9,10-dioxo-, disodium salt 102959-71-7, 1,6-Anthracenedisulfonic acid, 5-amino-8-[4-[3-[(2,3-dihydroxypropyl)amino]propionamido]-3-sulfoanilino]-9,10-dihydro-9,10-dioxo-, trisodium salt 103908-80-1, 2-Anthracenesulfonic acid, 1-amino-9,10-dihydro-4-[3-[2-[methyl-(gluco-2,3,4,5,6-pentahydroxyhexyl)amino]acetamido]-4-sulfoanilino]-9,10-dioxo-, disodium salt 106991-19-9, 2-Anthracenesulfonic acid, 1-amino-9,10-dihydro-4-[m-[[2-[methyl-(gluco-2,3,4,5,6-pentahydroxyhexyl)amino]ethyl]sulfamoyl]anilino]-9,10-dioxo-, potassium salt 109040-88-2, Copper, [hydrogen 3'-[[m-[N-methyl-N-(gluco-2,3,4,5,6-pentahydroxyhexyl)tauryl]phenyl]sulfamoyl]phthalocyaninesulfonato(2-)]-, potassium salt (prepn. of)

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L3          STR
L4  (        293)SEA FILE=REGISTRY SSS FUL L3
L5          STR
L6  (          4)SEA FILE=REGISTRY SUB=L4 SSS FUL L5
L7      289 SEA FILE=REGISTRY ABB=ON  PLU=ON  L4 NOT L6
L8      91 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L7
L9      1 SEA FILE=REGISTRY ABB=ON  PLU=ON  OLIGOETHER/BI
L10     168 SEA FILE=REGISTRY ABB=ON  PLU=ON  POLYETHER/BI OR POLYETHERS/BI

L11     1273885 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L9 OR L10 OR ?ETHER?
L12      12 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L11 AND L8
L23      7 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L8 AND (ION OR METAL)) NOT
L12
L24      7 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L23 NOT L12
L37     10 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L8 AND (NI2? OR LI OR NA OR
K OR MG2? OR CA2? OR SR2? OR BA2? OR AL3?)) NOT (L12 OR L24)

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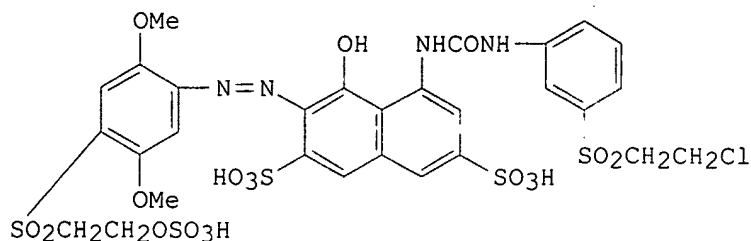
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L37 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1990:120601 HCAPLUS
 DOCUMENT NUMBER: 112:120601
 TITLE: Water-soluble, monoazo dyes containing a ureido group
 and two sulfonyl fiber-reactive groups
 INVENTOR(S): Thompson, Glenn A.; Corso, Anthony J.; Steuernagel,
 Hans H.
 PATENT ASSIGNEE(S): Crall, Hugh C., USA; Hoechst Celanese Corp.
 SOURCE: U.S., 14 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 4855411 A 19890808 US 1988-170585 19880317
 PRIORITY APPLN. INFO.: US 1988-170585 19880317
 OTHER SOURCE(S): CASREACT 112:120601; MARPAT 112:120601
 GI



I

AB The title dyes XSO2AN:NQN(R)CONHZSO2Y [A, Q = (un)substituted phenylene or (un)substituted naphthalene residues; R = H, Cl-4 alkyl, sulfonated lower alkyl; X, Y = CH:CH2, CH2CH2SSO3H, CH2CH2Br, CH2CH2OAc, CH2CH2OH7 CH2CH2OPO3H2, CH2CH2OSO2Me, CH2CH2OPh, CH2CH2OSO3H, CH2CH2Cl, CH2CH2OSO2Ph, CH2CH2N(R1)R2; R1, R2 = R; Z = (un)substituted Ph], which dye cellulosic fabrics in fast shades, are prepd. Thus, 1-amino-8-hydroxy-3,6-naphthalenedisulfonic acid mono Na salt was condensed with 3-(.beta.-chloroethylsulfonyl)phenyl-1-isocyanate, and the intermediate coupled with diazotized 1-amino-2,5-dimethoxyphenyl-4-(.beta.-sulfatoethylsulfone), producing I, which dyed cotton a fast violet shade. A soln. of I showed no chem. or phys. changes after 10 mo storage at pH .apprx.4.5.

IT 125679-24-5P
 RL: PREP (Preparation)
 (manuf. of, as reactive dye)

L37 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1988:215872 HCAPLUS

DOCUMENT NUMBER: 108:215872

TITLE: Antiarrhythmic profile of a new class 1 drug, AHR 10718, on canine atrial and ventricular arrhythmia models

AUTHOR(S): Mitsuhashi, Harumi; Hashimoto, Keitaro

CORPORATE SOURCE: Dep. Pharmacol., Yamanashi Med. Coll., Yamanashi, 409-38, Japan

SOURCE: Japanese Journal of Pharmacology (1988), 46(4), 349-58
 CODEN: JJPAAZ; ISSN: 0021-5198

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Antiarrhythmic effects of AHR 10718 (I) were examd. in 2-stage coronary-ligation-, digitalis- and adrenaline-induced canine ventricular arrhythmias and aconitine-induced canine atrial arrhythmia. AHR 10718 suppressed the arrhythmias except for adrenaline-induced arrhythmia. The min. effective plasma concns. of drug against arrhythmias induced by 24-h coronary ligation, 48-h coronary ligation and digitalis were 8.1 (by 10 mg/kg, i.v.), 2.9 (by 5 mg/kg, i.v.) and 2.8 (by 5 mg/kg, i.v.) .mu.g/mL, resp. The correlation coeffs. between the antiarrhythmic effects of AHR 10718 and its plasma concns. were not high. This pharmacol. profile is characteristic of class 1 Na channel blockers, and in particular, it is similar to those of disopyramide, procainamide and SUN 1165 from previous studies. AHR 10718 is expected to become a clin. useful antiarrhythmic drug.

IT 96436-73-6, AHR 10718

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(Uses)

(antiarrhythmic activity of)

L37 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1988:198036 HCAPLUS

DOCUMENT NUMBER: 108:198036

TITLE: Correlation between the antiarrhythmic effects of drugs on experimental ventricular arrhythmias and their cellular electrophysiological effects.

AUTHOR(S): Hashimoto, Keitaro

CORPORATE SOURCE: Dep. Pharmacol., Yamanashi Med. Coll., Yamanashi, 409-38, Japan

SOURCE: International Congress Series (1987), 750(Pharmacology), 497-500

CODEN: EXMDA4; ISSN: 0531-5131

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The effects of various cardiac drugs on 2-stage coronary artery ligation-, digitalis-, and adrenaline-induced arrhythmias were studied in dogs. The class 1 antiarrhythmics were divided into 3 classes: those effective in all 3 models, those with no effect or causing worsening in adrenaline-induced arrhythmia, and lidocaine, which was only effective in digitalis-induced arrhythmia. The class 2 .beta.-blockers were effective on adrenaline arrhythmias, and some, at high doses, on other arrhythmias. The class 4 Ca^{2+} -channel blockers also suppressed adrenaline arrhythmias, and one, KT362, suppressed all 3 types.

IT 96436-73-6, AHR10718

RL: BIOL (Biological study)

(heart arrhythmia inhibition by)

L37 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1985:214833 HCAPLUS

DOCUMENT NUMBER: 102:214833

TITLE: Electrophysiologic effects of AHR 10718 on isolated cardiac tissues

AUTHOR(S): Damiano, Bruce P.; Le Marec, Herve; Rosen, Michael R.

CORPORATE SOURCE: Coll. Physicians Surg., Columbia Univ., New York, NY, 10032, USA

SOURCE: European Journal of Pharmacology (1985), 108(3), 243-55

CODEN: EJPHAZ; ISSN: 0014-2999

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The electrophysiol. effects of the new antiarrhythmic compd. AHR 10718 (N'-(2-(diethylamino)ethyl)-N-(1-methylethyl)-N-(2-(phenylsulfonyl)ethyl)urea, (Z)-butanedioate) (I) [96436-73-6] were studied in canine cardiac tissues. In Purkinje fibers, I dose-dependently decreased the max. rate of rise (V_{\max}) of phase 0 of the action potential and decreased conduction velocity and action potential duration. In addn., membrane responsiveness was depressed and the effective refractory period shortened. The effects of I were not highly dependent on the extracellular K^+ concn. V_{\max} of ventricular muscle action potentials also was reduced. However, in contrast to Purkinje fibers, ventricular muscle action potentials were prolonged by I. I had no effect on slow response action potentials induced by isoproterenol and high K^+ . I decreased normal automaticity, catecholamine-enhanced automaticity, and abnormal automaticity induced by Ba or myocardial infarction. It also suppressed triggered activity and reduced delayed afterdepolarization amplitude in ouabain-treated Purkinje fibers and infarcted myocardium. I may be effective against arrhythmias resulting from conduction disturbances and certain forms of abnormal impulse initiation.

IT 96436-73-6

RL: BIOL (Biological study)

(heart electrophysiol. to, antiarrhythmic mechanism in relation to)

L37 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1984:419748 HCAPLUS

DOCUMENT NUMBER: 101:19748

TITLE: Immobilized polynucleotide phosphorylase. III.

Formation of the enzyme-polynucleotide complex

AUTHOR(S): Liu, Nianjuan; Zhang, Yuying; Yang, Kaiyu

CORPORATE SOURCE: Inst. Microbiol., Acad. Sin., Beijing, Peop. Rep. China

SOURCE: Weishengwu Xuebao (1983), 24(1), 50-7

CODEN: WSHPA8; ISSN: 0001-6209

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

AB The polynucleotide synthesized by immobilized polynucleotide phosphorylase (PNPase) was bound with the enzyme during polymn., forming an enzyme-polynucleotide complex. The use of immobilized enzyme facilitates the isolation of the complex with the easy sepn. of immobilized enzyme from the reaction mixt. Anal. of polymn. products showed no intermediate oligonucleotides; only remaining substrates and polymers with a high mol. wt. were detected. Apparently, the polymn. process catalyzed by immobilized PNPase involves a processive mechanism. When immobilized PNPase was incubated with substrate (ADP, CDP, or IDP) at optimum pH 8-9 for a long time without addn. of divalent cations, polymn. did occur, and the synthesized polynucleotides were also bound with the enzyme mols. Under identical conditions no polymn. was detected with native PNPase. This difference might be due to either the presence of small amts. of divalent cation on the carrier of ABSE-agarose or an unusual property caused by immobilization. The presence of substrate (without addn. of **Mg2+**) remarkably enhanced the stability of immobilized enzyme. The immobilized PNPase was used >680 times. In addn. to the immobilization, the superior operation stability of immobilized PNPase is due to the substrate and polynucleotide protection. Divalent cation (**Mg2+**) and pH 8-9 also exhibited good effects on the stability of enzyme. Among all these factors, the polynucleotide bound with the enzyme during polymn. greatly contributed to the stability of immobilized PNPase. Probably, the ABSE-agarose carrier-enzyme-polynucleotide ternary complex provides the best conformation for the stability of the enzyme.

IT 80111-44-0

RL: BIOL (Biological study)

(polynucleotide phosphorylase immobilized on, stabilization of, by polynucleotides and other compds.)

L37 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1981:104676 HCAPLUS

DOCUMENT NUMBER: 94:104676

TITLE: Sulfur-containing diisocyanates and their use in preparing polyurethanes

INVENTOR(S): Schwindt, Juergen; Groegler, Gerhard; Ganster, Otto; Koster, Johannes

PATENT ASSIGNEE(S): Bayer A.-G., Fed. Rep. Ger.

SOURCE: Ger. Offen., 48 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

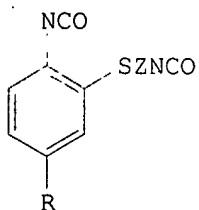
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2916135	A1	19801030	DE 1979-2916135	19790420
CA 1130304	A1	19820824	CA 1980-348518	19800326

US 4387057	A	19830607	US 1980-136624	19800402
EP 17883	A1	19801029	EP 1980-101845	19800405
EP 17883	B1	19811021		
R: AT, BE, CH, DE, FR, GB, IT, NL, SE				
AT 322	E	19811115	AT 1980-101845	19800405
AU 8057604	A1	19801023	AU 1980-57604	19800418
AU 532064	B2	19830915		
ES 490705	A1	19810416	ES 1980-490705	19800418
JP 56043259	A2	19810421	JP 1980-50545	19800418
ZA 8002321	A	19810930	ZA 1980-2321	19800418
PRIORITY APPLN. INFO.:			DE 1979-2916135	19790420
			EP 1980-101845	19800405

GI



AB The title isocyanates I (R = H, Br, Cl, alkylsulfonyl, alkoxy, or alkylthio, Z = C2 or higher alkylene or substituted or unsubstituted p-phenylene) are prepd. and used in the manuf. of rapid-curing urethane elastomers. Thus, 2,4'-diaminodiphenyl sulfide [6259-01-4] was prepd. by coupling Na o-aminothiophenoxide [52380-58-2] with 4-nitrochlorobenzene [100-00-5] and hydrogenating, and was phosgenated to give 2,4'-diisocyanatodiphenyl sulfide (I, R = H, Z = p-phenylene) (II) [75790-87-3]. A mixt. of 100 parts polypropylene glycol-polyoxypropylene triol prepolymer with NCO content 3.55% and 31.63 parts II was combined at 60.degree. with 10.82 parts 2-ethylhexyl 3,5-diamino-4-methylbenzoate, giving a compn. which remained castable for 1.5 min at 70.degree.. The compn. was poured into a mold preheated to 110.degree., could be removed after 1 min, and reached an acceptable strength level after 2 min. A control prepd. using 2,4-TDI instead of II required 3.5 min before removing and reached acceptable strength only after 7 min. Other phys. properties were comparable.

IT 76806-18-3P

RL: PREP (Preparation)

(manuf. of, for rapid-curing urethane elastomer synthesis)

L37 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1973:5402 HCAPLUS

DOCUMENT NUMBER: 78:5402

TITLE: Fiber-reactive azo and anthraquinone dyes

INVENTOR(S): Berner, Klaus; Hoyer, Ernst; Sommer, Karl

PATENT ASSIGNEE(S): Farbwerke Hoechst A.-G.

SOURCE: Ger. Offen., 58 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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DE 2106648	A	19720824	DE 1971-2106648	19710212
DE 2106648	B2	19791011		
DE 2106648	C3	19800626		

PRIORITY APPLN. INFO.: DE 1971-2106648 19710212
 AB Fifteen water-sol. dyes, R[SO₂CH₂CH₂N(CH₂CH₂OSO₃M)₂]_n (n = 1 or 2; M = H, K, or Na, R = azo or anthraquinone dye residue free of water-solubilizing groups), were prep'd. starting from H₂NQSO₂CH:CH₂ (Q = arylene) and used for dyeing and printing, e.g. silk, wool, polyamide, and cotton-polyester. Thus, a mixt. of 4,2,5-H₂N(MeO)₂C₆H₂SO₂CH:CH₂ and (HOCH₂CH₂)₂NH was heated 3 hr at 100.deg., the mixt. dissolved in pyridine, H₂NSO₃H added, the mixt. heated 30 min at 100-5.deg., diazotized, coupled with 3-methyl-1-phenyl-5-pyrazolone, and salted to give fiber-reactive dye I [37114-73-1], dyeing wool a level, wetfast yellow shade.
 IT 40082-39-1P 40082-82-4P
 RL: IMF (Industrial manufacture); PREP (Preparation) (prepn. of)

L37 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1966:67255 HCAPLUS
 DOCUMENT NUMBER: 64:67255
 ORIGINAL REFERENCE NO.: 64:12537b-c
 TITLE: Researches on organophosphorus insecticides. VIII. The preparations and chemical reactions of sodium salts of O-ethyl N,N-diethylphosphoramido mono (or di)-thioacids
 AUTHOR(S): Yang, Shih-Hsien; Chen, Tien-Chih; Wang, Chin-Sun; Chin, Kuei-Yu; Shao, Shu-Lien; Liu, Lun-Tsu
 CORPORATE SOURCE: Nankai Univ., Tientsin, Peop. Rep. China
 SOURCE: Huaxue Xuebao (1965), 31(5), 406-11
 CODEN: HHHPA4; ISSN: 0567-7351
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese
 AB cf. CA 64, 11240h. The prepn. and chem. properties of the Na salts of O-ethyl N,N-diethylphosphoramido mono(or di)-thioacids (I and II) were reported. I or II reacted with alkyl halides to give the corresponding alkyl esters. By acidifying with dil. HCl, I and II were converted into their corresponding acids, which, on treatment with alkyl iodide in the presence of org. bases, diazomethane, and cyclohexylamine, were transformed into the corresponding alkyl esters, methyl ester, and amide salts, resp. Reaction of II with Br or iodine gave [(EtO)(Et₂N)P(S)S]₂, which was transformed into (EtO)(Et₂N)P(S)Cl by reacting with chlorine.
 IT 5755-88-4, Acetanilide, 4'-[[2-[(2-mercaptoethyl)amino]ethyl]sulfonyl]-, sulfate (ester) (prepn. of)

L37 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1964:10158 HCAPLUS
 DOCUMENT NUMBER: 60:10158
 ORIGINAL REFERENCE NO.: 60:1870d-h, 1871a
 TITLE: Water-soluble dyes containing hydroxy alkyl groups
 INVENTOR(S): Heslop, Robert N.; Waite, Frederick A.
 PATENT ASSIGNEE(S): Imperial Chemical Industries Ltd.
 SOURCE: 9 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 927404		19630529	GB	19591120

AB (Throughout this abstr. Pc represents a phthalocyanine residue.) Azo, anthraquinone, and phthalo cyanine dyes contg. .gtoreq.1 SO₃H group and an alkyl group contg. .gtoreq.2 OH groups applied to cellulose in conjunction with HCHO and (or) a resin-forming intermediate and an acid-liberating

catalyst yield dyed, crease-resistant fabrics with excellent washfastness. Thus, a soln. of the di-Na salt of 1-amino-4-[3'-(.beta.-sulfatoethylsulfonfyl)anilino]anthraquinone-2-sulfonic acid (I) 20 and HOCH₂CH(OH)CH₂NH₂ (II) 26 in H₂O 500 parts is stirred 4 hrs. at 50.degree. and filtered at 20.degree.. Addn. of NaCl 125 to the filtrate ppts. a dye, which is stirred with 15% NaCl 100 parts, filtered, and washed with 15% NaCl. A soln. contg. the dye 1, melamine-HCHO precondensate 10, NH₄SCN 1, and nonionic wetting agent 0.2% padded on cotton (100% pickup), dried at 70.degree., baked 3 min. at 150.degree., washed, etc., yields a bright reddish blue fabric. Other dyes are prepd. similarly (reactants and shade of the product on cellulose given): I, N-methylglucamine (III), reddish blue; tri-Na 1-amino-4-[4'-(.beta.-chloropropionamido)anilino]anthraquinone-2,3',5-trisulfonate, II, greenish blue; di-Na 1-amino-4-[4'-(N-methyl-.beta.-chloropropionamido)anilino]anthraquinone-2,3'-disulfonate, H, reddish blue; di-Na bis(.beta.-chloroethylsulfamoyl)-1,4-bis[4-(2-methoxyphenoxy)anilino]anthraquinonedisulfonate, III, green; di-Na salt of 1-amino-4-[4'-methyl-3'-[(.beta.-sulfatoethylsulfonfyl)methyl]anilino]anthraquinone-2-sulfonic acid, III, blue; di-Na 1-amino-4-[3'-(chloroacetamido)anilino]anthraquinone-2,4'-disulfonate, III, reddish blue; di-Na 1-amino-4-[4'-(2-chloro-N-methylacetamido)anilino]anthraquinone-2,3'-disulfonate, III, -; di-Na 1-amino-4-[4'-(2-chloro-N-ethylacetamido)anilino]anthraquinone-2,3'-disulfonate, III, -; di-K salt of 1-amino-4-[3'-(.beta.-sulfatoethylsulfamoyl)-anilino]anthraquinone-2-sulfonic acid, III, reddish blue; di-K salt of 1-amino-4-[.beta.-[.alpha.-(.beta.-sulfatoethyl)ethylsulfamoyl]anilino]anthraquinone-2-sulfonic acid, III, -; di-K salt of 1-amino-4-[3'-[N-(.degree.-sulfatoethyl)-N-methylsulfamoyl]anilino]anthraquinone-2-sulfonic acid, III, -; Cu 3-Pe[SO₂NHC₆H₄(SO₂CH₂CH₂O-SO₃K)-3]SO₃K, III, bright greenish blue; Cu 3-Pc[SO₂NHC₆H₃-(SO₂CH₂CH₂OSO₃K)Me-3,4]SO₂K, III, -; Cu 3-Pc(SO₂NH-CH₂CH₂Cl)(SO₂NH₂)SO₃H (IV), III, bright greenish blue; Cu-Pc(SO₂NHCH₂CH₂Cl)SO₃H (V), III, -; Cu 3-PcSO₂N(Me)-CH₂CH₂Cl]SO₃H (VI), III, -; Cu 3-Pc[SO₂N(Et)CH₂CH₂Cl]-SO₃H (VII), III, -; IV, N-ethylglucamine (VIII), -; V, VIII, -; VI, VIII, -; VII, VIII, -; IV, N-(.degree.-hydroxyethyl)glucamine (IX), -; V, IX, -; VI, IX, -; VII, IX, -; IV, glucosamine (X), -; V, X, -; VI, X, -; VII, X, -; Cu 4-PcSO₂N(Me)CH₂(CHOH)4CH₂OH] (SO₂NHCH₂CH₂Cl)SO₃H, III, -; Cu 4-Pe(SO₂NHCH₂CH₂OH)(SO₂NHCH₂CH₂Cl)SO₃H, III, -; Cu 4-Pc(SO₂NHCH₂CHClCH₂Cl)(SO₂NH₂)SO₃H, III, -; Cu 4-Pc(SO₂NHCH₂CHOHCH₂Cl)(SO₃NH)SO₃H, III, -; tri-Na salt of the Cu complex of 8-acetamido-2-[2-hydroxy-5-(.degree.sulfatoethylsulfonfyl)phenylazo]-1-hydroxy-3,6-naphthalenedisulfonic acid, III, red-violet. Coupling 4-H₂NHC₆H₄COCH₂N(Me)CH₂(CHOH)4CH₂OH to 1-(3-sulfophenyl)-3-methyl-5-pyrazolone (XI) yields a dye, yellow on cellulose. Also yellow on cellulose are 4-H₂NHC₆H₄SO₂N(Me)[CH₂CH₂N(Me)CH₂(CHOH)4CH₂OH] .fwdarw. XI and 4-H₂NHC₆H₄N(Et)COCH₂N(Me)CH₂(CHOH)4CH₂OH .fwdarw. XI.

IT 109040-88-2, Copper, [hydrogen 3'-[[m-[N-methyl-N-(gluco-2,3,4-5,6-pentahydroxyhexyl)tauryl]phenyl]sulfamoyl]phthalocyaninesulfonato(2-)]-, potassium salt (prepn. of)

L37 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1950:38020 HCAPLUS

DOCUMENT NUMBER: 44:38020

ORIGINAL REFERENCE NO.: 44:7261d-i

TITLE: Sulfones. III. 4-Aminophenyl alkyl sulfones

AUTHOR(S): Baker, B. R.; Querry, Merle V.

CORPORATE SOURCE: Am. Cyanamid Co., Pearl River, NY

SOURCE: J. Org. Chem. (1950), 15, 413-16

CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

GI For diagram(s), see printed CA Issue.

AB Because p-H₂NC₆H₄SO₂Me has chemotherapeutic activity, some other alkyl analogs are prepd. HOCH₂CH₂Cl (108 cc.) heated 3 hrs. with 140 g. p-AcHNC₆H₄SO₂H (I) in 540 cc. H₂O contg. 36 g. NaOH, the ppt. filtered, and the filtrate made just alk. with 10% NaOH and heated another 3 hrs. with the soln. kept barely alk. by addn. of more NaOH, gives 54% p-AcNHC₆H₄SO₂CH₂CH₂OH (II), m. 192-3.degree.. II with p-MeC₆H₄SO₂Cl in C₅H₅N gives 79% p-(p-AcNHC₆H₄SO₂CH₂CH₂OSO₂) C₆H₄Me (III), m. 105-7.degree.. Heating III with piperidine gives 99% p-acetamidophenyl 2-(1-piperidyl)ethyl sulfone (IV), m. 110.degree. (with 1 H₂O) 121-3.degree. (H₂O-free). p-Acetamidophenyl 2-diethylaminoethyl sulfone, prepd. in 99% yield in a similar way, m. 100-2.degree.. Boiling III with 1-caxbethoxypiperazine gives 92% p-acetamidophenyl 2-(4-carbethoxy-1-piperazinyl)ethyl sulfone, m. 127-8.degree.. Refluxing 50 g. III 15 hrs. with 38 g. NaI in 380 cc. Me₂CO gives 87% p-acetamidophenyl 2-iodoethyl sulfone, m. 192-3.degree.. Heating 5 g. III and 2.5 g. K phthalimide in 5 cc. PrOH 1 hr. gives 96% p-acetamidophenyl 2-phthalimidoethyl sulfone, m. 216-21.degree.. Refluxing 10 g. I 2 hrs. in 50 cc. EtOH contg. 2 g. NaOH and 2 cc. H₂O with 7.5 g. PrI, dilg. the mixt. with H₂O, and extg. with AcOEt give 64% p-AcHNC₆H₄SO₂R (V) (R = Pr), m. 125-7.degree.. In a similar way the following V are prepd. (R, the refluxing time in hrs., yield, and m.p. in the order given): CH₂:CHCH₂, 20 min., 67%, 113-15.degree.; o-C₆H₄CO)2N(CH₂)₆, 20, 87%, 175-7.degree.; CH₂CH₂CO₂H, 17, 42%, 182-3.degree., p-O₂NC₆H₄CH₂, 10 min., 70%, 246-50.degree., EtO₂CCHBu, 2.5, 67%, 102-4.degree.. V are sapond. by boiling 15 min. with 6 N HCl (10 cc./g.), giving the following p-H₂NC₆H₄SO₂R: R = HOCH₂CH₂, m. 210-13.degree. (decompn.); Et₂NCH₂CH₂, m. 102-4.degree.; C₅H₁₀NCH₂CH₂, m. 127-9.degree.; CH₂.CH₂.N(CO₂Et).CH₂.CH₂.NCH₂CH₂, m. 96-8.degree. (decompn.); H₂NCH₂CH₂, m. 235-8.degree. (decompn.); ICH₂CH₂, m. 206-8.degree. (decompn.); Pr, m. 215-17.degree. (decompn.); CH₂:CHCH₂, m. 212-13.degree. (decompn.); C₈H₁₇, m. 96-8.degree.; Cl₂H₂₅, m. 105-7.degree.; H₂N(CH₂)₆, m. 217-20.degree. (decompn.); HO₂CCH₂CH₂, m. 222-4.degree. (decompn.); p-H₂NC₆H₄CH₂, m. 215-16.degree. (decompn.); EtO₂CCHBu, m. 148-50.degree. (decompn.); Me, m. 236-7.degree. (decompn.).

IT 100862-20-2, Acetanilide, 4'-(2-diethylaminoethylsulfonyl)-(prepn. of)

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L40 87 S L39 AND L7

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86	RN	5755-88-4	REGISTRY
87	RN	1021-56-3	REGISTRY

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L40 ANSWER 1 OF 87 REGISTRY COPYRIGHT 2003 ACS

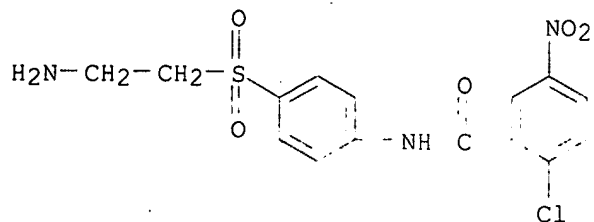
RN 518981-73-2 REGISTRY

CN Benzamide, N-[4-[(2-aminoethyl)sulfonyl]phenyl]-2-chloro-5-nitro-,
monohydrochloride (9CI) (CA INDEX NAME)

MF C15 H14 Cl N3 O5 S . Cl H

SR CA

LC STN Files: CA, CAPLUS



● HCl

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:368620

L40 ANSWER 3 OF 87. REGISTRY COPYRIGHT 2003 ACS

RN **479548-95-3** REGISTRY

CN Cuprate(5-), [.mu.-[2-[[[3-[[4-chloro-6-[[2-[[2-[[4-(hydroxy-.kappa.O)-3-[[2-(hydroxy-.kappa.O)-3,6-disulfo-1-naphthalenyl]azo-.kappa.N1]phenyl]sulfonyl]ethyl]amino]-1-methylethyl]amino]-1,3,5-triazin-2-yl]amino]-2-(hydroxy-.kappa.O)-5-sulfophenyl]azo-.kappa.N2]phenylmethyl]azo-.kappa.N1]-4-sulfobenzoato(9-)]di-, pentahydrogen (9CI) (CA INDEX NAME)

MF C44 H30 Cl Cu2 N12 O19 S5 . 5 H

CI CCS

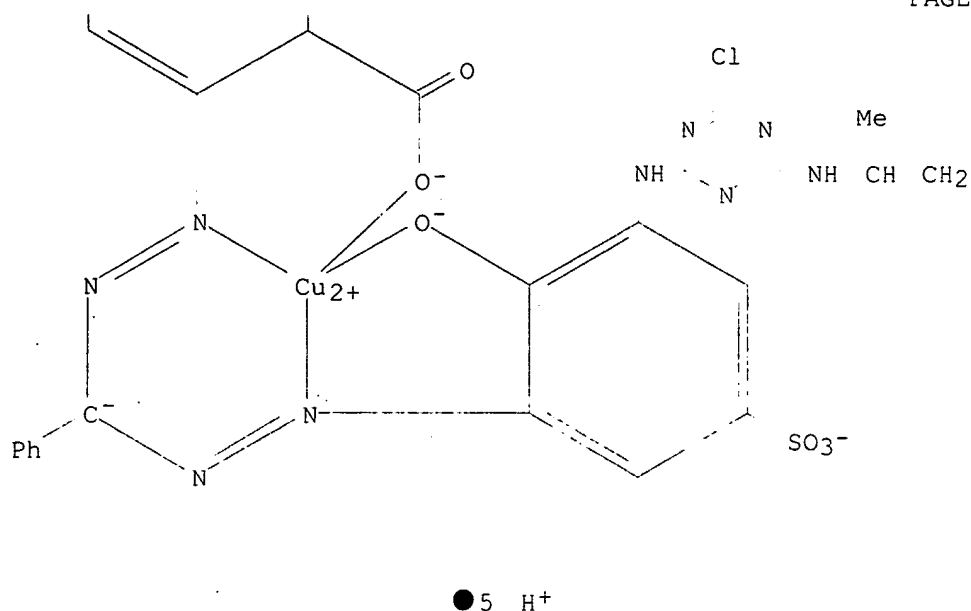
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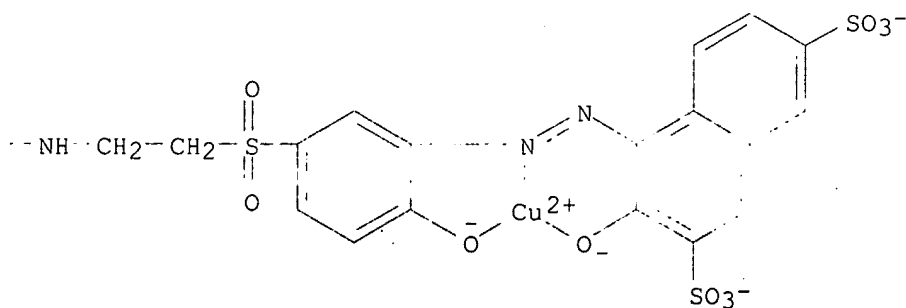
PAGE 1-A



PAGE 2-A



PAGE 2-B



1 REFERENCES IN FILE CA (1957 TO DATE)

1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:57470

L40 ANSWER 4 OF 87 REGISTRY COPYRIGHT 2003 ACS

RN 477284-42-7 REGISTRY

CN 2,7-Naphthalenedisulfonic acid, 4-amino-3-[[4-[[2-bis[2-(dimethylamino)ethyl]amino]ethyl]sulfonyl]phenyl]azo]-6-[[4-[[2-(dimethylamino)ethyl]sulfonyl]phenyl]azo]-5-hydroxy-, disodium salt (9CI)
(CA INDEX NAME)

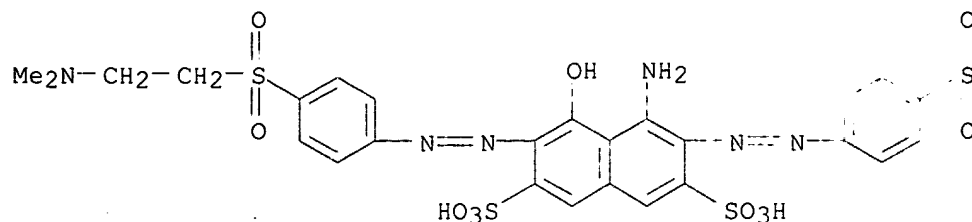
MF C36 H49 N9 O11 S4 . 2 Na

SR CA

LC STN Files: CA, CAPLUS

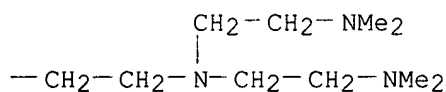
CRN (477284-41-6)

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● 2 Na

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1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:5591

L40 ANSWER 10 OF 87 REGISTRY COPYRIGHT 2003 ACS

RN 392328-93-7 REGISTRY

CN Urea, N'-[2-[(6-chloro-2-naphthalenyl)sulfonyl]ethyl]-N-methyl-N-[1-(4-pyridinyl)-4-piperidinyl]- (9CI) (CA INDEX NAME)

OTHER NAMES:

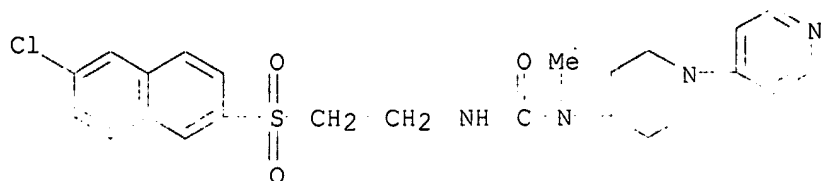
CN N-[2-[(6-Chloro-2-naphthyl)sulfonyl]ethyl]-N'-methyl-N'-[1-(4-pyridyl)-4-piperidinyl]urea

FS 3D CONCORD

MF C24 H27 Cl N4 O3 S

SR CA

LC STN Files: CA, CAPLUS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 136:134784

L40 ANSWER 11 OF 87 REGISTRY COPYRIGHT 2003 ACS

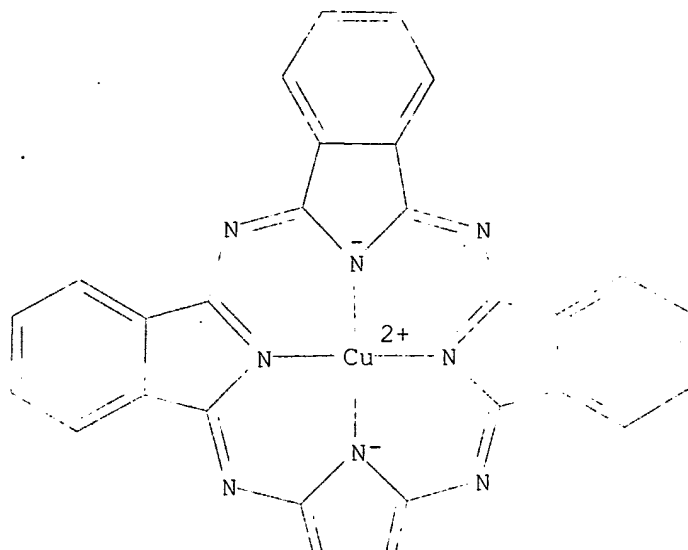
RN 382145-35-9 REGISTRY

CN Cuprate(3-), [C-[[[4-[[2-[(3,3,5,5-tetramethylhexyl)amino]ethyl]sulfonyl]p

henyl]amino]sulfonyl]-29H,31H-phthalocyanine-C,C,C-trisulfonato(5-)-
 .kappa.N29,.kappa.N30,.kappa.N31,.kappa.N32]-, trihydrogen (9CI) (CA
 INDEX NAME)

MF C50 H43 Cu N10 O13 S5 . 3 H
 CI CCS, IDS
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL

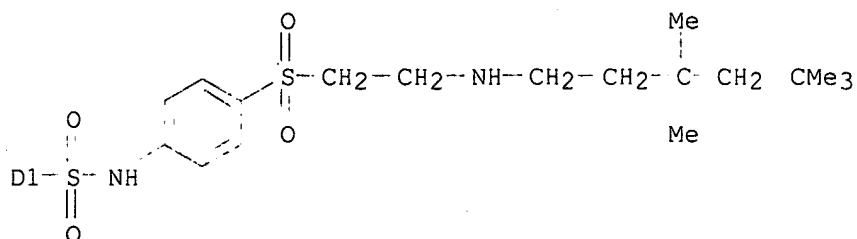
PAGE 1-A



PAGE 2-A



3 D1 SO₃⁻



PAGE 3-A

●3 H⁺

1 REFERENCES IN FILE CA (1957 TO DATE)

1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 136:55223

L40 ANSWER 19 OF 87 REGISTRY COPYRIGHT 2003 ACS

RN 288271-21-6 REGISTRY

CN Cuprate(3-), [C-[[[4-[[2-[bis(2-hydroxyethyl)amino]ethyl]sulfonyl]phenyl]a
mino]sulfonyl]-29H,31H-phthalocyanine-C,C,C-trisulfonato(5-)-
.kappa.N29,.kappa.N30,.kappa.N31,.kappa.N32]-, tripotassium (9CI) (CA
INDEX NAME)

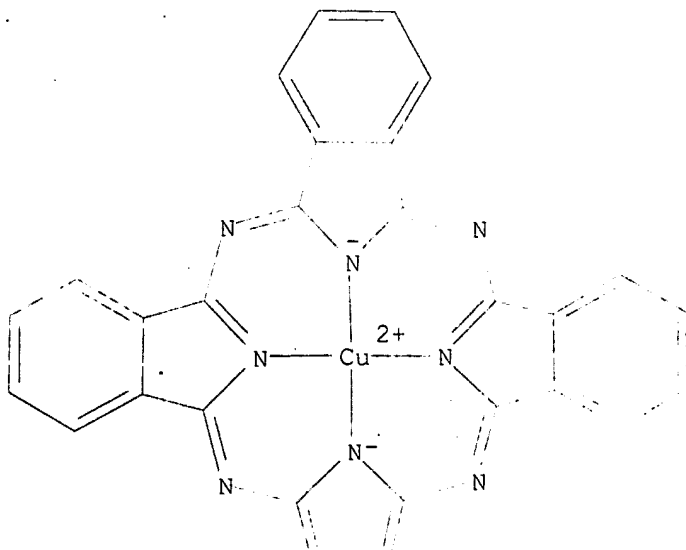
MF C44 H31 Cu N10 O15 S5 . 3 K

CI CCS, IDS

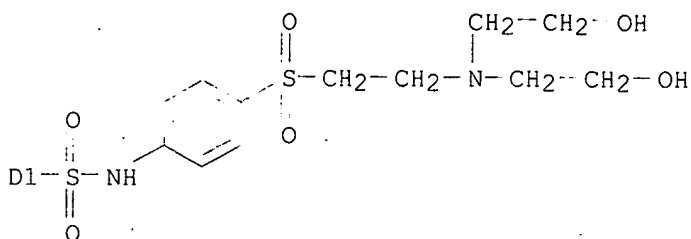
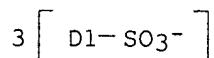
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

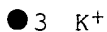
PAGE 1-A



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2 REFERENCES IN FILE CA (1957 TO DATE)

2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 136:55223

REFERENCE 2: 133:178901

L40 ANSWER 25 OF 87 REGISTRY COPYRIGHT 2003 ACS

RN 252017-99-5 REGISTRY

CN Propanamide, N-[2-chloro-4-[[2-(dimethylamino)ethyl]sulfonyl]phenyl]-3,3,3-trifluoro-2-hydroxy-2-methyl-, (2R)- (9CI) (CA INDEX NAME)

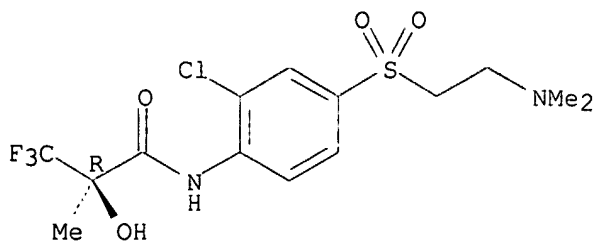
FS STEREOSEARCH

MF C14 H18 Cl F3 N2 O4 S

SR CA

LC STN Files: CA, CAPLUS, USP&T FULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 132:22753

L40 ANSWER 26 OF 87 REGISTRY COPYRIGHT 2003 ACS

RN 221356-44-1 REGISTRY

CN Cuprate(2-), [C,C-bis[[[4-[[2-[[3-[4-(3-aminopropyl)-1-piperazinyl]propyl]amino]ethyl]sulfonyl]phenyl]amino]sulfonyl]-29H,31H-phthalocyanine-C,C-disulfonato(4-)-.kappa.N29,.kappa.N30,.kappa.N31,.kappa.N32]-, diammonium (9CI) (CA INDEX NAME)

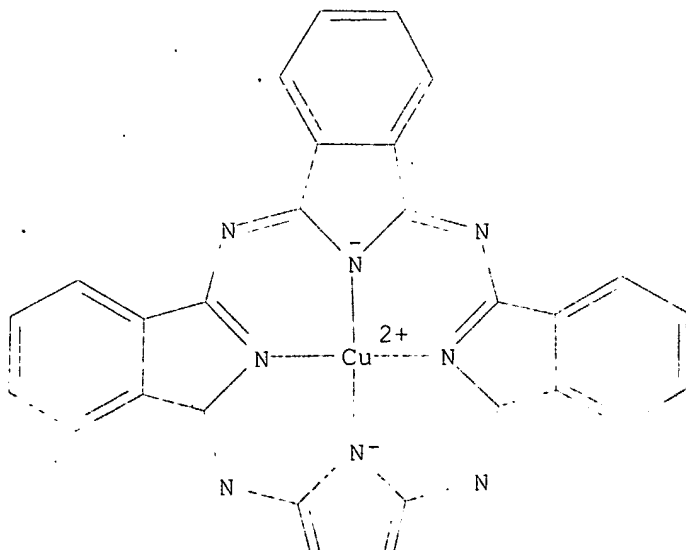
MF C68 H76 Cu N18 O14 S6 . 2 H4 N

CI CCS, IDS

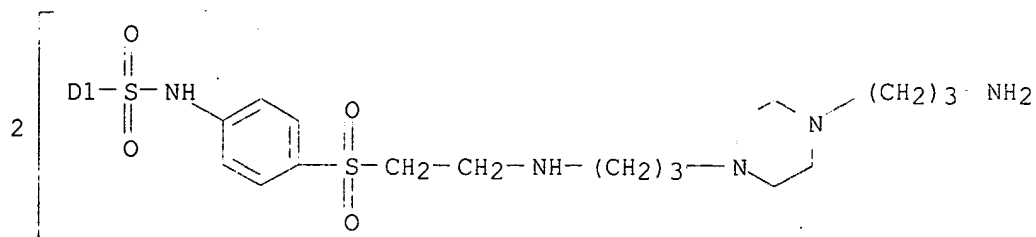
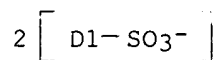
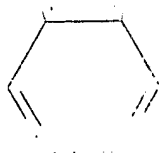
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

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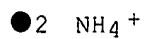


PAGE 2-A



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PAGE 3-A



1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 130:238784

L40 ANSWER 29 OF 87 REGISTRY COPYRIGHT 2003 ACS

RN 221355-17-5 REGISTRY

CN Cuprate(2-), [C,C-bis[[[4-[[2-[[3-[4-(3-aminopropyl)-1-piperazinyl]propyl]amino]ethyl]sulfonyl]phenyl]amino]sulfonyl]-29H,31H-phthalocyanine-C,C-disulfonato(4-)-.kappa.N29,.kappa.N30,.kappa.N31,.kappa.N32]-, dihydrogen (9CI) (CA INDEX NAME)

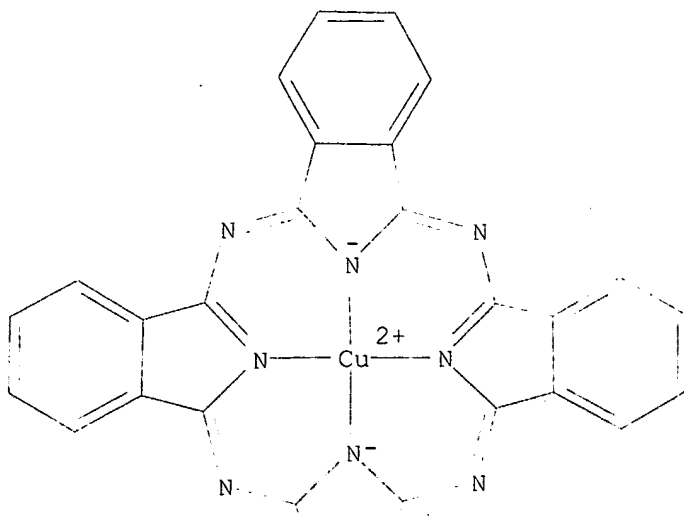
MF C68 H76 Cu N18 O14 S6 . 2 H

CI CCS, IDS

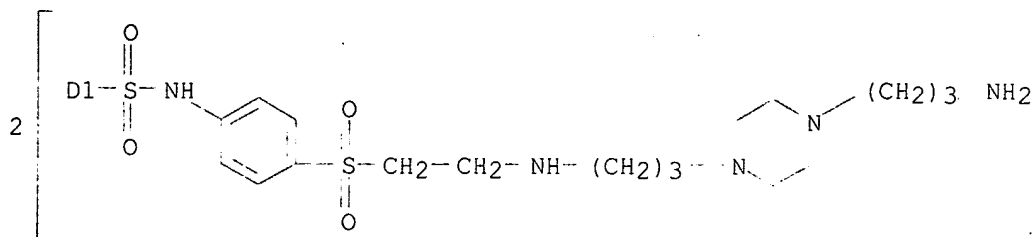
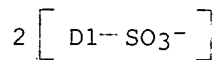
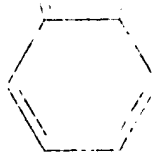
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

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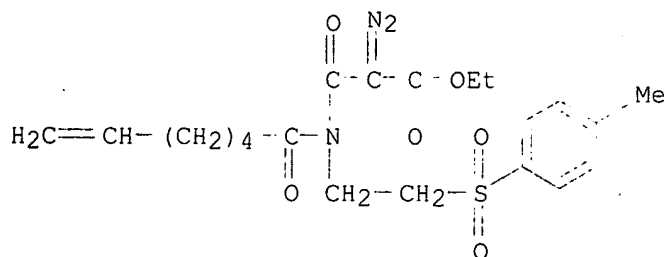
PAGE 3-A

● 2 H⁺

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 130:238784

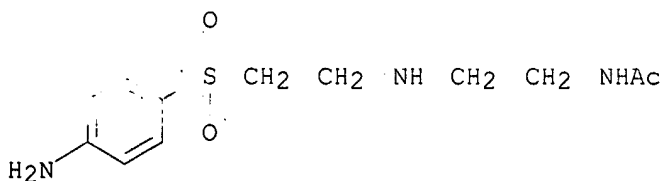
L40 ANSWER 32 OF 87 REGISTRY COPYRIGHT 2003 ACS
 RN 220445-83-0 REGISTRY
 CN Propanoic acid, 2-diazo-3-[[2-[(4-methylphenyl)sulfonyl]ethyl](1-oxo-6-heptenyl)amino]-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)
 FS 3D CONCORD
 MF C21 H27 N3 O6 S
 SR CA
 LC STN Files: CA, CAPLUS, CASREACT



1 REFERENCES IN FILE CA (1957 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 130:168225

L40 ANSWER 34 OF 87 REGISTRY COPYRIGHT 2003 ACS
 RN 219636-34-7 REGISTRY
 CN Acetamide, N-[2-[[2-[(4-aminophenyl)sulfonyl]ethyl]amino]ethyl]- (9CI)
 (CA INDEX NAME)
 FS 3D CONCORD
 MF C12 H19 N3 O3 S
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL



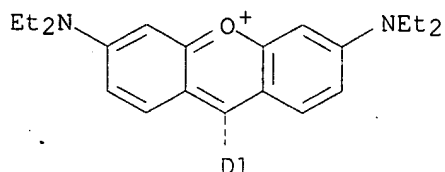
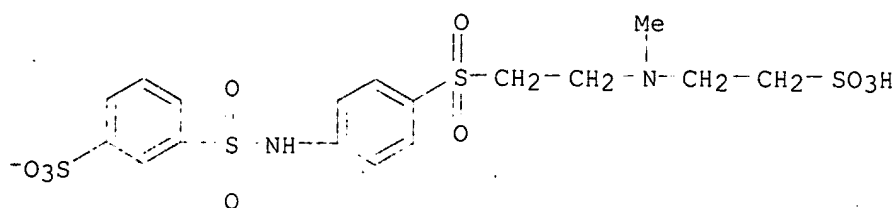
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 130:111502

L40 ANSWER 36 OF 87 REGISTRY COPYRIGHT 2003 ACS
 RN 212395-73-8 REGISTRY
 CN Xanthylium, 3,6-bis(diethylamino)-9-[2(or 4)-[[[4-[[2-[methyl(2-sulfoethyl)amino]ethyl]sulfonyl]phenyl]amino]sulfonyl]-4(or 2)-sulfoethyl]-, inner salt (9CI) (CA INDEX NAME)
 MF C38 H46 N4 O11 S4
 CI IDS
 SR CA

LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 129:217900

L40 ANSWER 37 OF 87 REGISTRY COPYRIGHT 2003 ACS

RN 212209-69-3 REGISTRY

CN 1,2-Ethanediaminium, N,N-bis[2-[[6-[[8-(benzoylamino)-1-hydroxy-3,6-disulfo-2-naphthalenyl]azo]-4-sulfo-2-naphthalenyl]sulfonyl]ethyl]-N'-(3-hydroxypropyl)-N,N',N'-trimethyl-, bis(methyl sulfate) (salt), hexasodium salt (9CI) (CA INDEX NAME)

MF C66 H64 N8 O27 S8 . 2 C H3 O4 S . 6 Na

SR CA

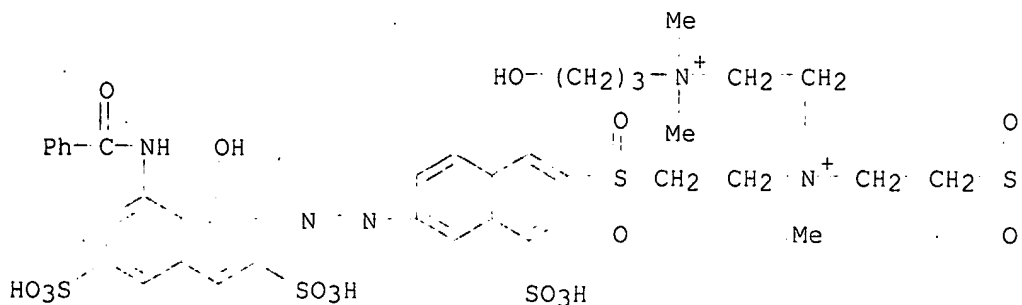
LC STN Files: CA, CAPLUS, USPATFULL

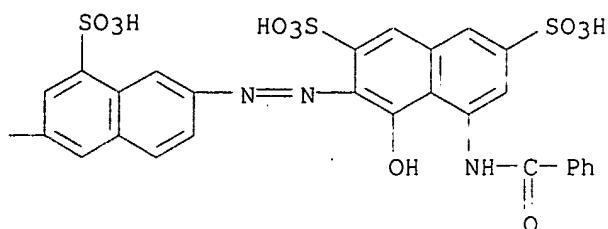
CM 1

CRN 212209-68-2

CMF C66 H64 N8 O27 S8

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CRN 21228-90-0
CMF C H3 O4 S

$$\text{Me} - \text{O} - \text{SO}_3^-$$

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 129:218065

L40 ANSWER 38 OF 87 ' REGISTRY COPYRIGHT 2003 ACS

RN 204976-25-0 REGISTRY

CN 1,2-Ethanediaminium, N,N-bis[2-[[6-[[8-(benzoylamino)-1-hydroxy-3,6-disulfo-2-naphthalenyl]azo]-5-sulfo-2-naphthalenyl]sulfonyl]ethyl]-N'-(3-hydroxypropyl)-N,N',N'-trimethyl-, bis(methyl sulfate) (salt), hexasodium salt (9CI) (CA INDEX NAME)

MF C66 H64 N8 O27 S8 . 2 C H3 O4 S . 6 Na

SR CA

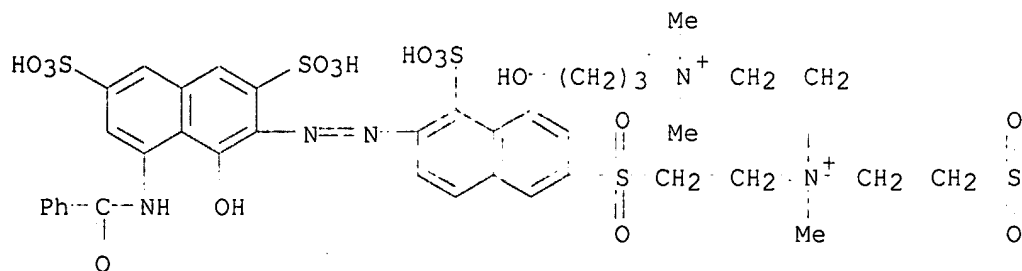
LC STN Files: CA, CAPLUS, USPATFULL

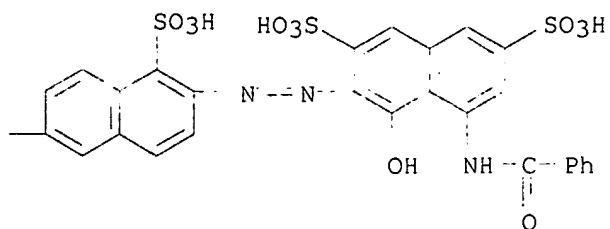
CM 1

CRN 204976-24-9

CMF C66 H64 N8 O27 S8

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CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me--O--SO₃⁻

1 REFERENCES IN FILE CA (1957 TO DATE)

1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 128:271816

L40 ANSWER 39 OF 87 REGISTRY COPYRIGHT 2003 ACS

RN 173256-08-1 REGISTRY

CN Cuprate(3-), [2-[[[[[5-[[2-(cyanoamino)ethyl]sulfonyl]-2-hydroxy-3-sulfophenyl]azo]phenylmethyl]azo]-4-sulfobenzoato(5-)]-], trihydrogen (9CI)
(CA INDEX NAME)

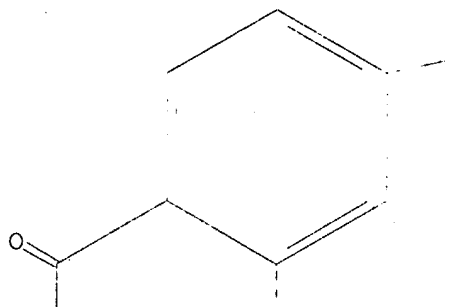
MF C23 H15 Cu N6 O11 S3 . 3 H

CI CCS

SR CA

LC STN Files: CA, CAPLUS

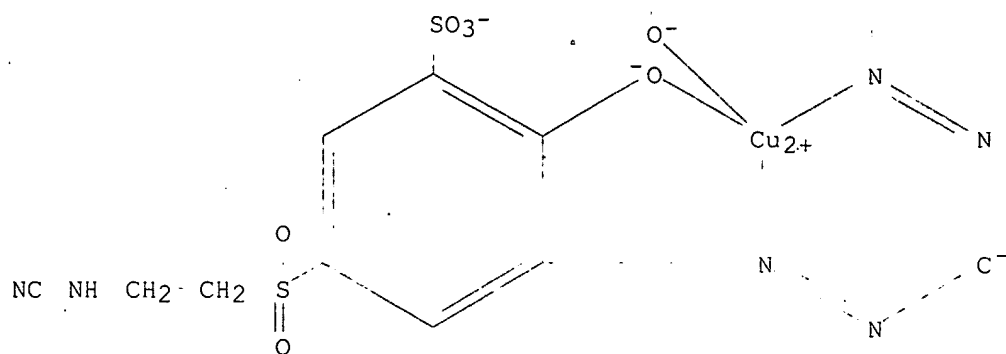
PAGE 1-A



PAGE 1-B

-SO₃⁻

PAGE 2-A

● 3 H⁺

PAGE 2-B

Ph

1 REFERENCES IN FILE CA (1957 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 124:120109

L40 ANSWER 42 OF 87 REGISTRY COPYRIGHT 2003 ACS

RN 173063-35-9 REGISTRY

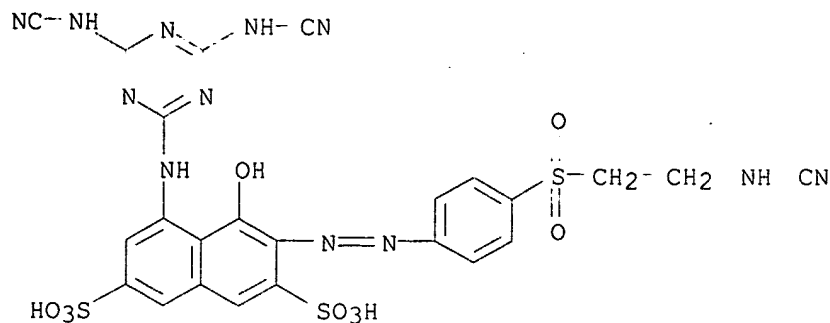
CN 2,7-Naphthalenedisulfonic acid, 5-[[[4,6-bis(cyanoamino)-1,3,5-triazin-2-yl]amino]-3-[[4-[[2-(cyanoamino)ethyl]sulfonyl]phenyl]azo]-4-hydroxy-
 (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C24 H18 N12 O9 S3

SR CA

LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 124:120110

L40 ANSWER 46 OF 87 REGISTRY COPYRIGHT 2003 ACS

RN 168766-92-5 REGISTRY

CN Tryptophan, N-[2-(hydroxyimino)-4-methyl-1-oxopentyl]-N-[2-(phenylsulfonyl)ethyl]- (9CI) (CA INDEX NAME)

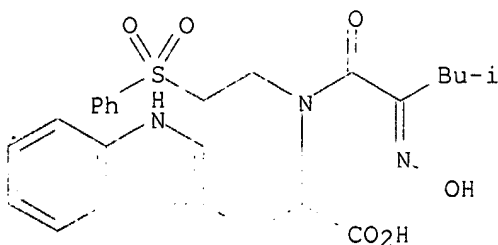
OTHER CA INDEX NAMES:

CN DL-Tryptophan, N-[2-(hydroxyimino)-4-methyl-1-oxopentyl]-N-[2-(phenylsulfonyl)ethyl]-

MF C25 H29 N3 O6 S

SR CA

LC STN Files: CA, CAPLUS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 123:256434

L40 ANSWER 51 OF 87 REGISTRY COPYRIGHT 2003 ACS

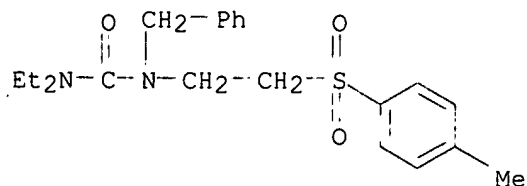
RN 158612-51-2 REGISTRY

CN Urea, N,N-diethyl-N'-[2-[(4-methylphenyl)sulfonyl]ethyl]-N'-(phenylmethyl)- (9CI) (CA INDEX NAME)

MF C21 H28 N2 O3 S

SR CA

LC STN Files: CA, CAPLUS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 121:255452

L40 ANSWER 52 OF 87 REGISTRY COPYRIGHT 2003 ACS

RN 155687-25-5 REGISTRY

CN 2,7-Naphthalenedisulfonic acid, 4-amino-6-[[2,5-dimethoxy-4-[[2-[[2-[[3-(trihydroxysilyl)propyl]amino]ethyl]amino]ethyl]sulfonyl]phenyl]azo]-5-hydroxy-3-[[4-[[2-[[2-[[3-(trihydroxysilyl)propyl]amino]ethyl]amino]ethyl]sulfonyl]phenyl]azo]- (9CI) (CA INDEX NAME)

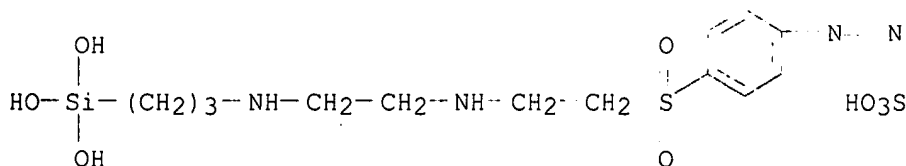
FS 3D CONCORD

MF C38 H57 N9 O19 S4 Si2

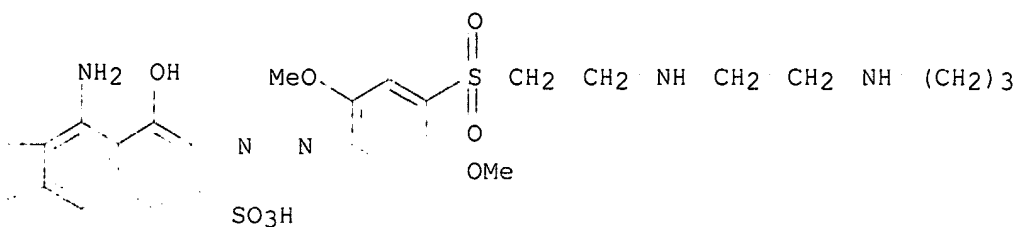
SR CA

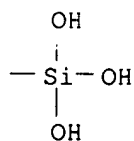
LC STN Files: CA, CAPLUS

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PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 121:85703

L40 ANSWER 53 OF 87 REGISTRY COPYRIGHT 2003 ACS

RN 152993-40-3 REGISTRY

CN Ethanol, 2-mercapto-, polymer with 1-isothiocyanato-4-[(2-isothiocyanatoethyl)sulfonyl]benzene (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Benzene, 1-isothiocyanato-4-[(2-isothiocyanatoethyl)sulfonyl]-, polymer with 2-mercaptoethanol (9CI)

MF (C10 H8 N2 O2 S3 . C2 H6 O S)x

CI PMS

PCT Polyether, Polyether only

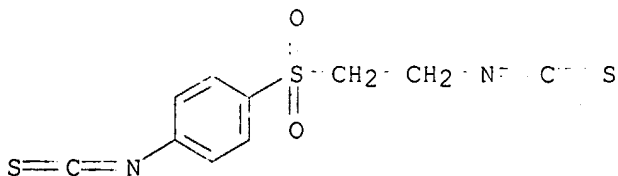
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 1021-56-3

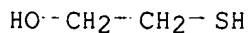
CMF C10 H8 N2 O2 S3



CM 2

CRN 60-24-2

CMF C2 H6 O S



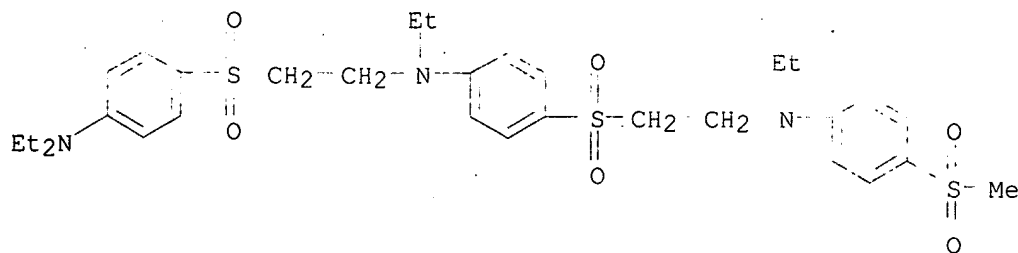
3 REFERENCES IN FILE CA (1957 TO DATE)
3 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 125:12775

REFERENCE 2: 121:257086

REFERENCE 3: 120:108740

L40 ANSWER 54 OF 87 REGISTRY COPYRIGHT 2003 ACS
 RN 150221-19-5 REGISTRY
 CN Benzenamine, N-[2-[[4-(diethylamino)phenyl]sulfonyl]ethyl]-N-ethyl-4-[[2-[ethyl[4-(methylsulfonyl)phenyl]amino]ethyl]sulfonyl]- (9CI) (CA INDEX NAME)
 FS 3D CONCORD
 MF C31 H43 N3 O6 S3
 SR CA
 LC STN Files: CA, CAPLUS, TOXCENTER

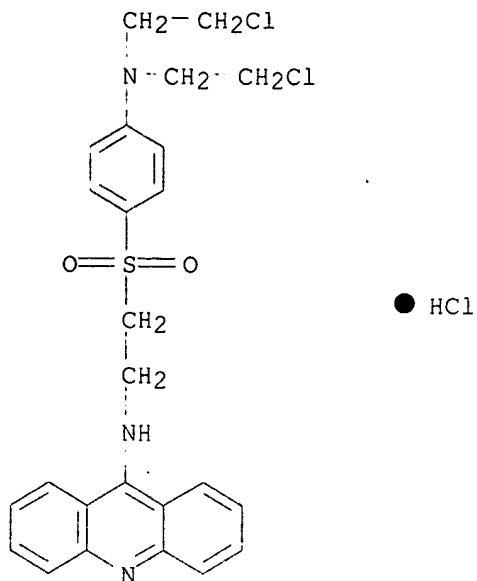


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 119:159790

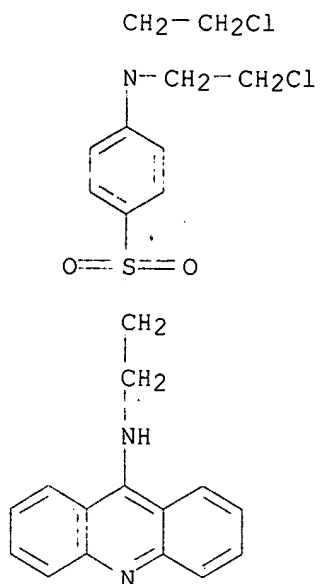
L40 ANSWER 56 OF 87 REGISTRY COPYRIGHT 2003 ACS
 RN 130199-16-5 REGISTRY
 CN 9-Acridinamine, N-[2-[[4-[bis(2-chloroethyl)amino]phenyl]sulfonyl]ethyl]-, monohydrochloride (9CI) (CA INDEX NAME)
 MF C25 H25 Cl2 N3 O2 S.. Cl H
 SR CA
 LC STN Files: BEILSTEIN*, CA, CAPLUS, TOXCENTER
 (*File contains numerically searchable property data)
 CRN (130198-68-4)



1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 113:231187

L40 ANSWER 58 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **130198-68-4** REGISTRY
CN 9-Acridinamine, N-[2-[[4-[bis(2-chloroethyl)amino]phenyl]sulfonyl]ethyl]-
(9CI) (CA INDEX NAME)
MF C25 H25 Cl2 N3 O2 S
CI COM
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, TOXCENTER
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1957 TO DATE)

4 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 130:231875

REFERENCE 2: 125:75323

REFERENCE 3: 118:204683

REFERENCE 4: 113:231187

L40 ANSWER 59 OF 87 REGISTRY COPYRIGHT 2003 ACS

RN **128603-98-5** REGISTRY

CN 1,4-Dithiane-2,5-diol, polymer with 1-isothiocyanato-4-[(2-isothiocyanatoethyl)sulfonyl]benzene (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Benzene, 1-isothiocyanato-4-[(2-isothiocyanatoethyl)sulfonyl]-, polymer with 1,4-dithiane-2,5-diol (9CI)

MF (C10 H8 N2 O2 S3 . C4 H8 O2 S2)x

CI PMS

PCT Polyether, Polyether only

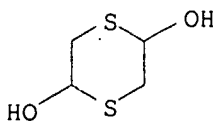
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 40018-26-6

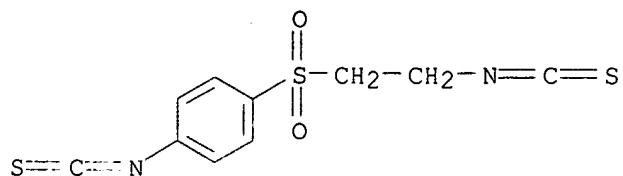
CMF C4 H8 O2 S2



CM 2

CRN 1021-56-3

CMF C10 H8 N2 O2 S3



2 REFERENCES IN FILE CA (1957 TO DATE)

2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 133:127459

REFERENCE 2: 113:79779

L40 ANSWER 60 OF 87 REGISTRY COPYRIGHT 2003 ACS

RN 125679-24-5 REGISTRY

CN Cuprate(4-), [4-hydroxy-3-[[2-hydroxy-4-[[2-[methyl(2-sulfoethyl)amino]ethyl]sulfonyl]phenyl]azo]-5-[[[3-[[2-[methyl(2-sulfoethyl)amino]ethyl]sulfonyl]phenyl]amino]carbonyl]amino]-2,7-naphthalenedisulfonato(6-)]-, tetrahydrogen (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2,7-Naphthalenedisulfonic acid, 4-hydroxy-3-[[2-hydroxy-4-[[2-[methyl(2-sulfoethyl)amino]ethyl]sulfonyl]phenyl]azo]-5-[[[3-[[2-[methyl(2-sulfoethyl)amino]ethyl]sulfonyl]phenyl]amino]carbonyl]amino]-, copper complex

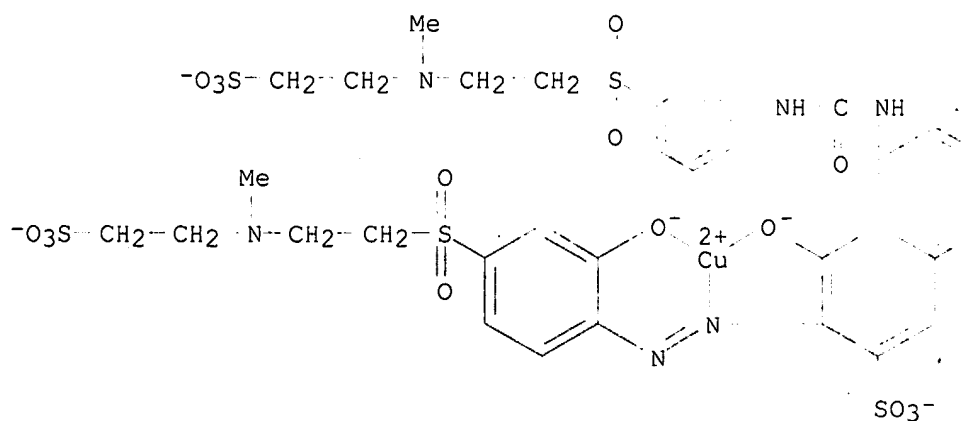
MF C33 H34 Cu N6 O19 S6 . 4 H

CI CCS

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-A

● 4 H⁺

PAGE 1-B

- SO₃⁻

1 REFERENCES IN FILE CA (1957 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 112:120601

L40 ANSWER 61 OF 87 REGISTRY COPYRIGHT 2003 ACS

RN 125651-31-2 REGISTRY

CN Urea, N'-[2-(diethylamino)ethyl]-N-[3-(diethylamino)propyl]-N-[2-(phenylsulfonyl)ethyl]-, 2-hydroxy-1,2,3-propanetricarboxylate (1:2) (9CI)
 (CA INDEX NAME)

OTHER NAMES:

CN AHR 12234

MF C22 H40 N4 O3 S . 2 C6 H8 O7

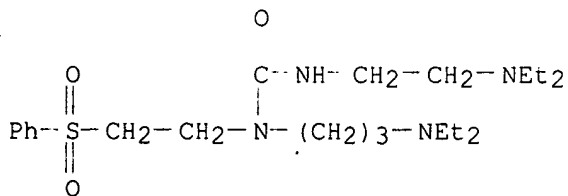
SR CA

LC STN Files: BIOSIS, CA, CAPLUS, EMBASE, MEDLINE, TOXCENTER

CM 1

CRN 121100-28-5

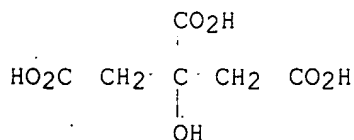
CMF C22 H40 N4 O3 S



CM 2

CRN 77-92-9

CMF C6 H8 O7



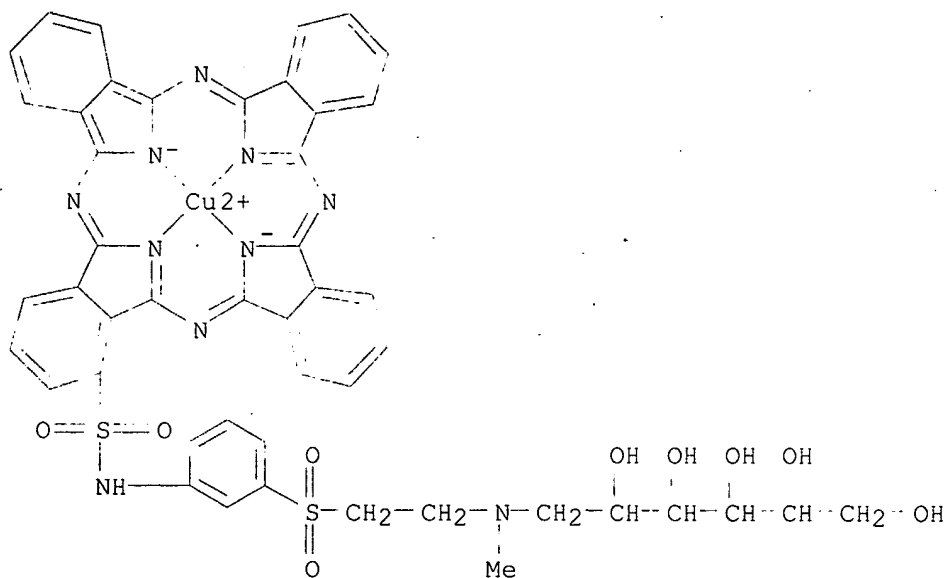
2 REFERENCES IN FILE CA (1957 TO DATE)
 2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 120:144163

REFERENCE 2: 112:111740

L40 ANSWER 62 OF 87 REGISTRY COPYRIGHT 2003 ACS
 RN 109040-88-2 REGISTRY
 CN Copper, [hydrogen 3'[[m-[N-methyl-N-(gluco-2,3,4,5,6-pentahydroxyhexyl)tauryl]phenyl]sulfamoyl]phthalocyaninesulfonato(2-)]-, potassium salt (7CI) (CA INDEX NAME)
 MF C47 H39 Cu N10 O12 S3 . K
 CI CCS, IDS
 SR CAOLD
 LC STN Files: CA, CAOLD, CAPLUS

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D1-SO₃⁻● K⁺

1 REFERENCES IN FILE CA (1957 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1957 TO DATE)
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 60:10158

L40 ANSWER 63 OF 87 REGISTRY COPYRIGHT 2003 ACS
 RN 105038-63-9 REGISTRY
 CN Cuprate(7-), [1-(2,5-dichloro-4-sulfophenyl)-4,5-dihydro-5-oxo-4-[[5-[[2-[[2-methoxy-4-[[8,15,22-trisulfo-29H,31H-phthalocyanin-1-yl-.kappa.N29,.kappa.N30,.kappa.N31,.kappa.N32)sulfonyl]amino]phenyl]sulfonyl]ethyl]amino]-2-sulfophenyl]azo]-1H-pyrazole-3-carboxylato(8-)]-, hexahydrogen, (SP-4-2)- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 1H-Pyrazole-3-carboxylic acid, 1-(2,5-dichloro-4-sulfophenyl)-4,5-dihydro-5-oxo-4-[[5-[[2-[[2-methoxy-4-[[8,15,22-trisulfo-29H,31H-phthalocyanin-1-

yl)sulfonyl]amino]phenyl)sulfonyl]ethyl]amino]-2-sulfophenyl]azo]-, copper complex

CN Cuprate(7-), [1-(2,5-dichloro-4-sulfophenyl)-4,5-dihydro-5-oxo-4-[[5-[[2-[[2-methoxy-4-[[[(8,15,22-trisulfo-29H,31H-phthalocyanin-1-yl)sulfonyl]amino]phenyl)sulfonyl]ethyl]amino]-2-sulfophenyl]azo]-1H-pyrazole-3-carboxylato(8-)-N29,N30,N31,N32]-, hexahydrogen, (SP-4-2)-

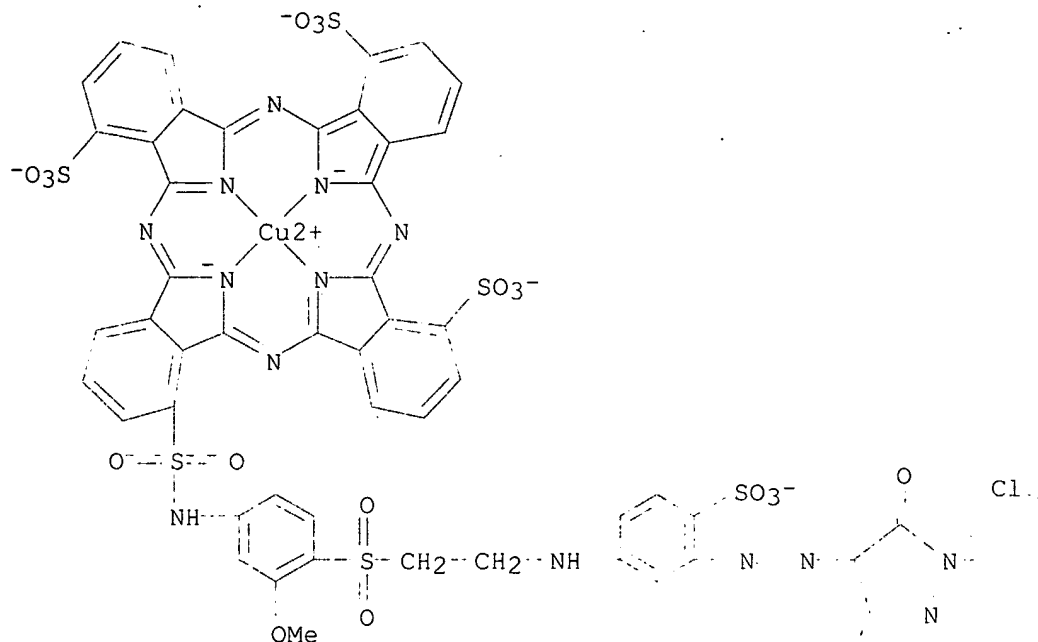
MF C57 H30 Cl2 Cu N14 O23 S7 . 6 H

CI CCS

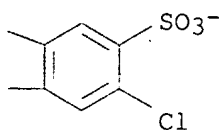
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

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PAGE 2-A

-O₂C● 6 H⁺

2 REFERENCES IN FILE CA (1957 TO DATE)
 2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 130:238784

REFERENCE 2: 105:192866

L40 ANSWER 65 OF 87 REGISTRY COPYRIGHT 2003 ACS

RN 105015-18-7 REGISTRY

CN Cuprate(5-), [4-[[2-chloro-4-[[2-[[3-[[[(8,15,22-trisulfo-29H,31H-phthalocyanin-1-yl)sulfonyl]amino]phenyl)sulfonyl]ethyl]amino]phenyl]azo]-4,5-dihydro-5-oxo-1-(3-sulfophenyl)-1H-pyrazole-3-carboxylato(7-)-N29,N30,N31,N32]-, pentahydrogen, (SP-4-2)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1H-Pyrazole-3-carboxylic acid, 4-[[2-chloro-4-[[2-[[3-[[[(8,15,22-trisulfo-29H,31H-phthalocyanin-1-yl)sulfonyl]amino]phenyl)sulfonyl]ethyl]amino]phenyl]azo]-4,5-dihydro-5-oxo-1-(3-sulfophenyl)-, copper complex

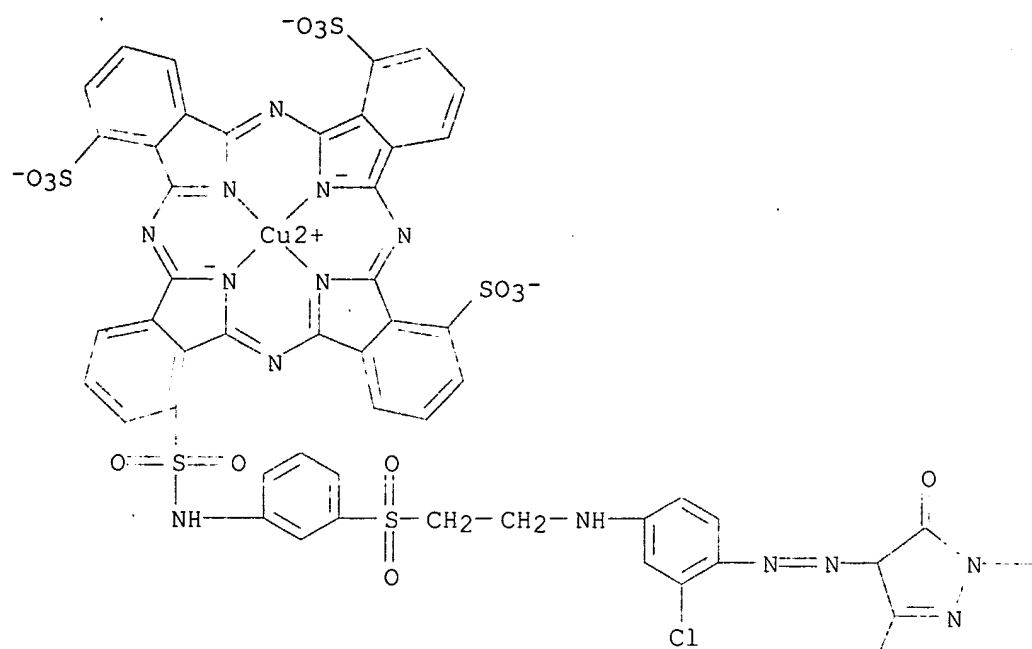
MF C56 H30 Cl Cu N14 O19 S6 . 5 H

CI CCS

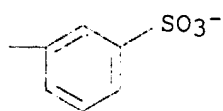
SR CA

LC STN Files: CA, CAPLUS

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-O₂C●5 H⁺

1 REFERENCES IN FILE CA (1957 TO DATE)

1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 105:192866

L40 ANSWER 67 OF 87 REGISTRY COPYRIGHT 2003 ACS

RN 104994-17-4 REGISTRY

CN Cuprate(4-), [22-[[[4-[[2-[[3-[[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]azo]-4-sulfophenyl]amino]ethyl]sulfonyl]phenyl]amino]sulfonyl]-29H,31H-phthalocyanine-1,8,15-trisulfonato(6-)-.kappa.N29,.kappa.N30,.kappa.N31,.kappa.N32]-, tetrahydrogen, (SP-4-2)-(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 29H,31H-Phthalocyanine-1,8,15-trisulfonic acid, 22-[[[4-[[2-[[3-[[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]azo]-4-sulfophenyl]amino]ethyl]sulfonyl]phenyl]amino]sulfonyl]-, copper complex

CN Cuprate(4-), [22-[[[4-[[2-[[3-[[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]azo]-4-sulfophenyl]amino]ethyl]sulfonyl]phenyl]amino]sulfonyl]-29H,31H-phthalocyanine-1,8,15-trisulfonato(6-)-N29,N30,N31,N32]-, tetrahydrogen, (SP-4-2)-

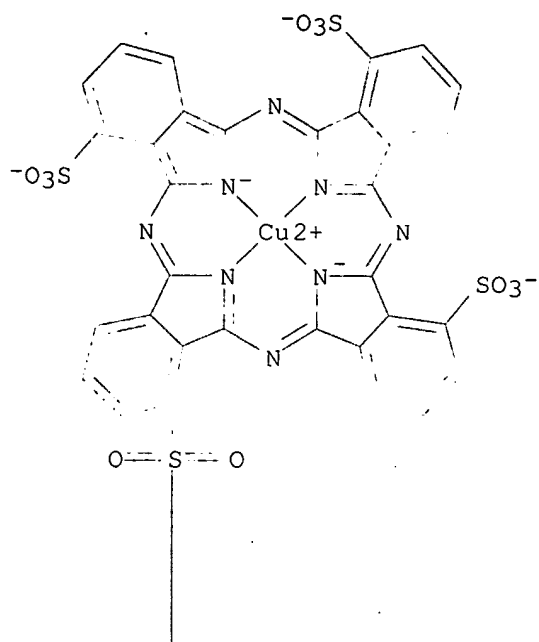
MF C55 H36 Cu N14 O19 S6 . 4 H

CI CCS

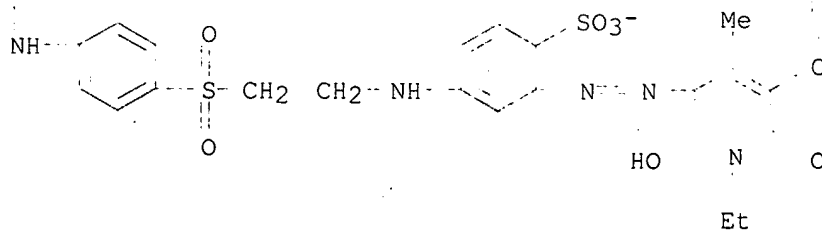
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

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● 4 H⁺

PAGE 2-B

- NH₂

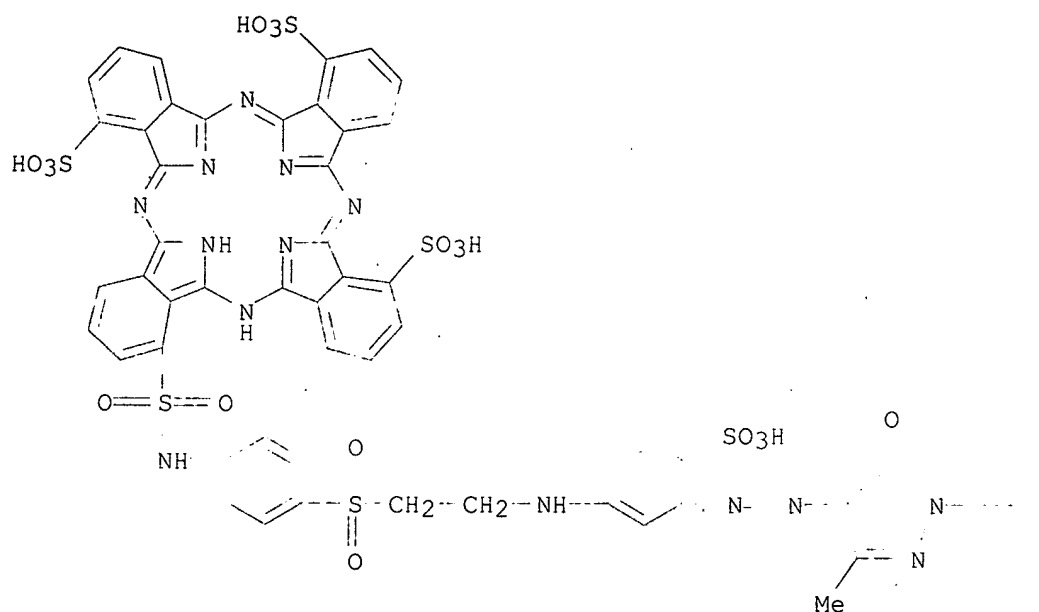
2 REFERENCES IN FILE CA (1957 TO DATE)
 2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 130:238784

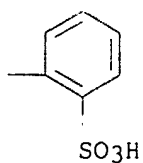
REFERENCE 2: 105:192866

L40 ANSWER 70 OF 87 REGISTRY COPYRIGHT 2003 ACS
 RN 104359-64-0 REGISTRY
 CN 29H,31H-Phthalocyanine-1,8,15-trisulfonic acid, 22-[[[4-[[2-[[3-[[4,5-dihydro-3-methyl-5-oxo-1-(2-sulfophenyl)-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]ethyl]sulfonyl]phenyl]amino]sulfonyl]- (9CI) (CA INDEX NAME)
 MF C56 H40 N14 O20 S7
 SR CA
 LC STN Files: CA, CAPLUS

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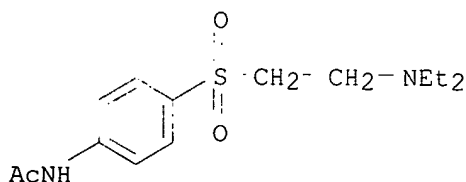


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 105:192866

L40 ANSWER 71 OF 87 REGISTRY COPYRIGHT 2003 ACS
 RN 100862-20-2 REGISTRY
 CN Acetanilide, 4'-(2-diethylaminoethylsulfonyl)- (6CI) (CA INDEX NAME)
 FS 3D CONCORD
 MF C14 H22 N2 O3 S
 SR CAOLD
 LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS
 (*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1957 TO DATE)
 3 REFERENCES IN FILE CAPLUS (1957 TO DATE)
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 55:64883

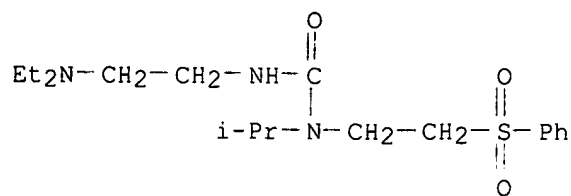
REFERENCE 2: 46:48438

REFERENCE 3: 44:38020

L40 ANSWER 72 OF 87 REGISTRY COPYRIGHT 2003 ACS
 RN 96436-73-6 REGISTRY
 CN Urea, N'-[2-(diethylamino)ethyl]-N-(1-methylethyl)-N-[2-(phenylsulfonyl)ethyl]-, (2Z)-2-butenedioate (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Urea, N'-[2-(diethylamino)ethyl]-N-(1-methylethyl)-N-[2-(phenylsulfonyl)ethyl]-, (Z)-2-butenedioate
 OTHER NAMES:
 CN AHR 10718
 FS STEREOSEARCH
 MF C18 H31 N3 O3 S . x C4 H4 O4
 LC STN Files: BIOSIS, CA, CAPLUS, MEDLINE, TOXCENTER

CM 1

CRN 85053-46-9
 CMF C18 H31 N3 O3 S

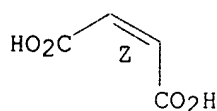


CM 2

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



3 REFERENCES IN FILE CA (1957 TO DATE)

3 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 108:215872

REFERENCE 2: 108:198036

REFERENCE 3: 102:214833

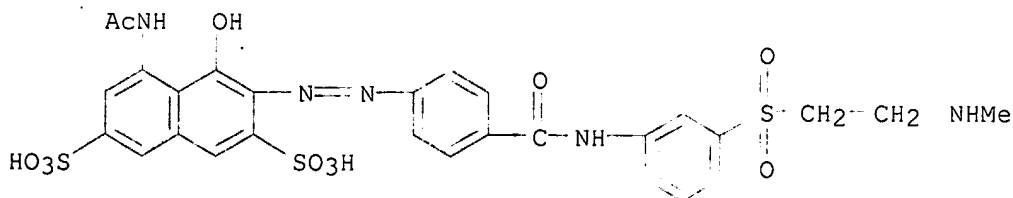
L40 ANSWER 73 OF 87 REGISTRY COPYRIGHT 2003 ACS

RN 88640-57-7 REGISTRY

CN 2,7-Naphthalenedisulfonic acid, 5-(acetylamino)-4-hydroxy-3-[[4-[[[3-[[2-(methylamino)ethyl]sulfonyl]phenyl]amino]carbonyl]phenyl]azo]-, disodium salt (9CI) (CA INDEX NAME)

MF C28 H27 N5 O11 S3 . 2 Na

LC STN Files: CA, CAPLUS



● 2 Na

1 REFERENCES IN FILE CA (1957 TO DATE)

1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 100:53022

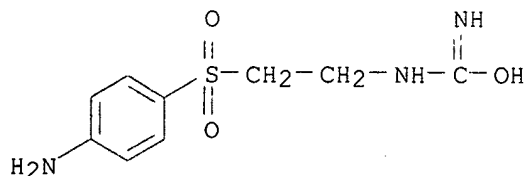
L40 ANSWER 74 OF 87 REGISTRY COPYRIGHT 2003 ACS

RN 80111-44-0 REGISTRY

CN Agarose, [2-[(4-aminophenyl)sulfonyl]ethyl]carbamidate (9CI) (CA INDEX NAME)
 MF C9 H13 N3 O3 S . x Unspecified
 LC STN Files: CA, CAPLUS

CM 1

CRN 173046-53-2
 CMF C9 H13 N3 O3 S



CM 2

CRN 9012-36-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

4 REFERENCES IN FILE CA (1957 TO DATE)

4 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 103:2611

REFERENCE 2: 102:181389

REFERENCE 3: 101:19748

REFERENCE 4: 96:2922

L40 ANSWER 75 OF 87 REGISTRY COPYRIGHT 2003 ACS

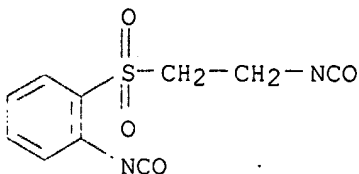
RN 76806-18-3 REGISTRY

CN Benzene, 1-isocyanato-2-[(2-isocyanatoethyl)sulfonyl]- (9CI). (CA INDEX NAME)

FS 3D CONCORD

MF C10 H8 N2 O4 S

LC STN Files: CA, CAPLUS, USPATFULL



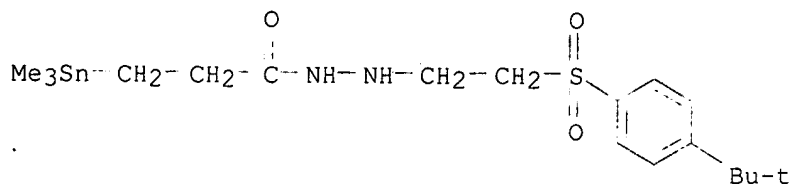
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)

1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 94:104676

L40 ANSWER 76 OF 87 REGISTRY COPYRIGHT 2003 ACS
 RN 72959-14-9 REGISTRY
 CN Propanoic acid, 3-(trimethylstannyl)-, 2-[2-[[4-(1,1-dimethylethyl)phenyl]sulfonyl]ethyl]hydrazide (9CI) (CA INDEX NAME)
 MF C18 H32 N2 O3 S Sn
 LC STN Files: BEILSTEIN*, CA, CAPLUS, USPATFULL
 (*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

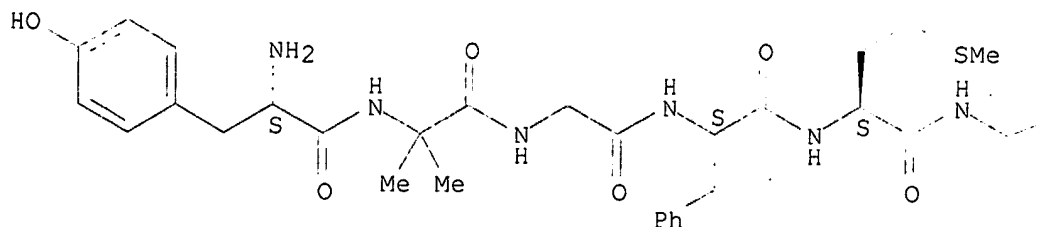
REFERENCE 1: 92:111156

L40 ANSWER 77 OF 87 REGISTRY COPYRIGHT 2003 ACS
 RN 72564-55-7 REGISTRY
 CN L-Methioninamide, L-tyrosyl-2-methylalanylglycyl-L-phenylalanyl-N-[2-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]ethyl]- (9CI) (CA INDEX NAME)
 FS PROTEIN SEQUENCE; STEREOSEARCH
 MF C43 H55 N7 O8 S2
 LC STN Files: CA, CAPLUS

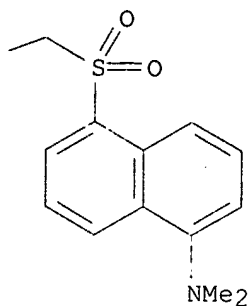
RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.

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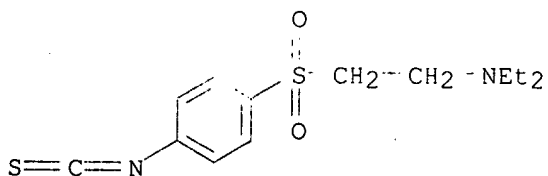
PAGE 1-B



1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 92:52415

L40 ANSWER 78 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN 40330-87-8 REGISTRY
CN Ethanamine, N,N-diethyl-2-[(4-isothiocyanatophenyl)sulfonyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C13 H18 N2 O2 S2
LC STN Files: BEILSTEIN*, CA, CAPLUS, TOXCENTER
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1957 TO DATE)
3 REFERENCES IN FILE CAPLUS (1957 TO DATE)

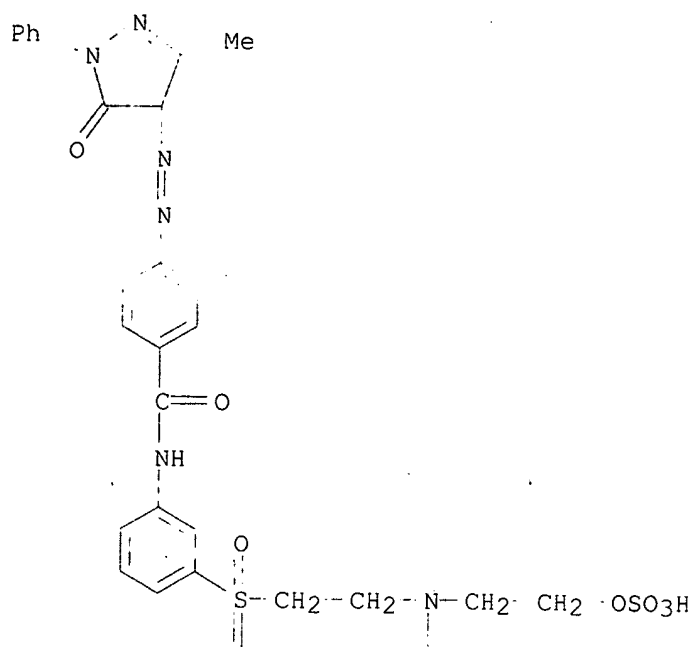
REFERENCE 1: 94:76568

REFERENCE 2: 81:37388

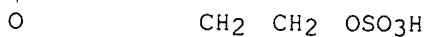
REFERENCE 3: 78:83960

L40 ANSWER 79 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN 40082-82-4 REGISTRY
CN Benzamide, N-[3-[[2-[bis[2-(sulfooxy)ethyl]amino]ethyl)sulfonyl]phenyl]-4-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-, disodium salt (9CI) (CA INDEX NAME)
MF C29 H32 N6 O12 S3 . 2 Na
LC STN Files: CA, CAPLUS

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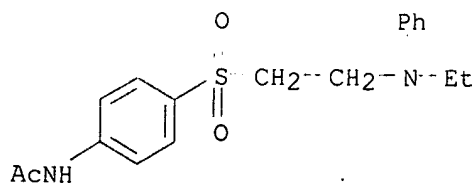


● 2 Na

1 REFERENCES IN FILE CA (1957 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 78:5402

L40 ANSWER 81 OF 87 REGISTRY COPYRIGHT 2003 ACS
 RN 37710-59-1 REGISTRY
 CN Acetamide, N-[4-[[2-(ethylphenylamino)ethyl]sulfonyl]phenyl]- (9CI) (CA INDEX NAME)
 FS 3D CONCORD
 MF C18 H22 N2 O3 S
 LC STN Files: CA, CAPLUS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 78:85938

L40 ANSWER 82 OF 87 REGISTRY COPYRIGHT 2003 ACS

RN 29244-86-8 REGISTRY

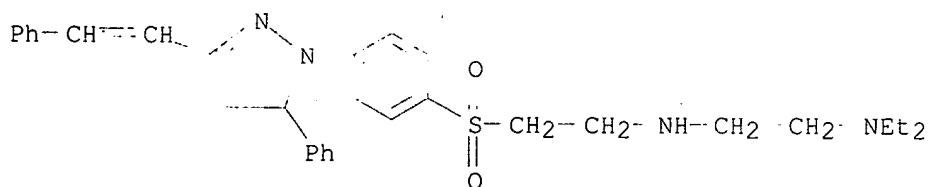
CN 1,2-Ethanediamine, N'-[2-[[4-[4,5-dihydro-5-phenyl-3-(2-phenylethenyl)-1H-pyrazol-1-yl]phenyl]sulfonyl]ethyl]-N,N-diethyl- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2-Pyrazoline, 1-[p-[N-[2-(diethylamino)ethyl]tauryl]phenyl]-5-phenyl-3-styryl- (8CI)

FS 3D CONCORD

MF C31 H38 N4 O2 S

LC STN Files: BEILSTEIN*, CA, CAPLUS, IFICDB, IFIPAT, IFIUDB
(*File contains numerically searchable property data)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1957 TO DATE)
3 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 77:21588

REFERENCE 2: 74:100614

REFERENCE 3: 73:78560

L40 ANSWER 83 OF 87 REGISTRY COPYRIGHT 2003 ACS

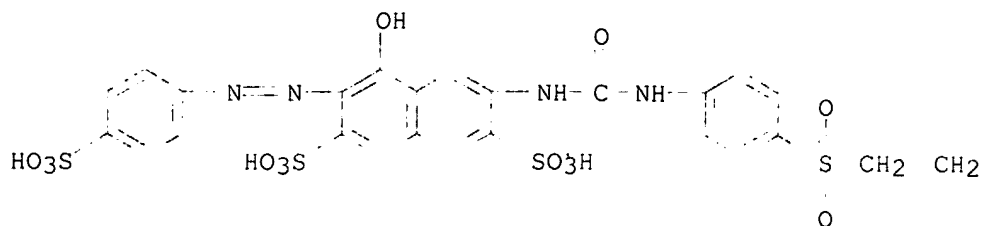
RN 24273-68-5 REGISTRY

CN 2,7-Naphthalenedisulfonic acid, 6-[3-[p-(N,N-diethyltauryl)phenyl]ureido]-4-hydroxy-3-[(p-sulfophenyl)azo]- (8CI) (CA INDEX NAME)

FS 3D CONCORD

MF C29 H31 N5 O13 S4

LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB



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- NET2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 71:125974

L40 ANSWER 84 OF 87 REGISTRY COPYRIGHT 2003 ACS

RN 7291-83-0 REGISTRY

CN Benzoic acid, 2-[[[1-[4-[[4-[[2-[[4-[(4-amino-9,10-dihydro-9,10-dioxo-3-sulfo-1-anthracenyl)amino]phenyl]amino]ethyl]sulfonyl]benzoyl]amino]phenyl]-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-5-sulfo- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

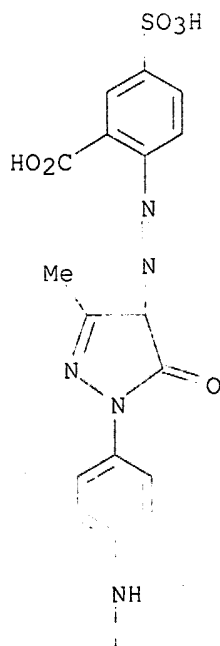
CN Benzoic acid, 2-[[[1-[p-[p-[[2-[p-[(4-amino-3-sulfo-1-anthraquinonyl)amino]anilino]ethyl]sulfonyl]benzamido]phenyl]-5-hydroxy-3-methylpyrazol-4-yl]azo]-5-sulfo- (8CI)

FS 3D CONCORD

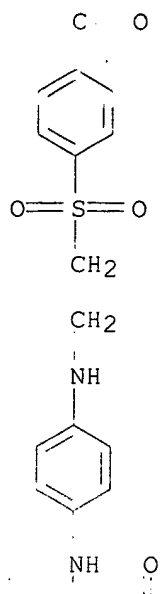
MF C46 H36 N8 O14 S3

LC STN Files: CA, CAOLD, CAPLUS

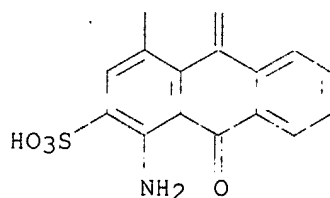
PAGE 1-A



PAGE 2-A



PAGE 3-A



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 1 REFERENCES IN FILE CA (1957 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1957 TO DATE)
- 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 65:65338

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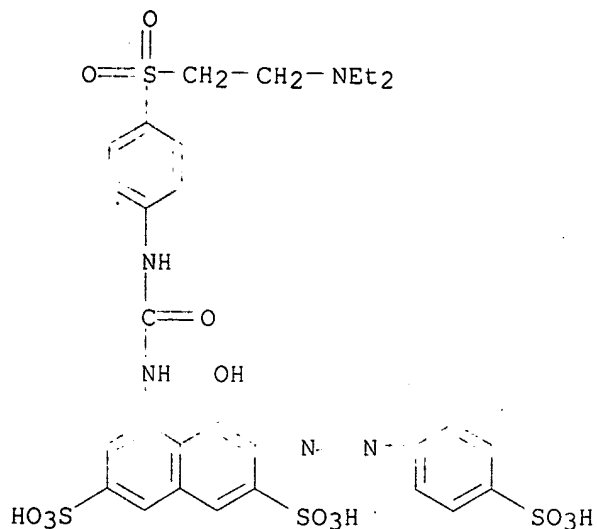
RN 6730-50-3 REGISTRY

CN 2,7-Naphthalenedisulfonic acid, 5-[[3-[[2-(diethylamino)ethyl]sulfonyl]phenyl]ureido]-4-hydroxy-3-[(p-sulfonylphenyl)azo]- (7CI, 8CI) (CA INDEX NAME)

FS 3D CONCORD

MF C29 H31 N5 O13 S4

LC STN Files: CA, CAOLD, CAPLUS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1957 TO DATE)
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 65:29899

L40 ANSWER 86 OF 87 REGISTRY COPYRIGHT 2003 ACS

RN 5755-88-4 REGISTRY

CN Acetanilide, 4'-[[2-[(2-mercaptoethyl)amino]ethyl]sulfonyl]-, sulfate (ester) (8CI) (CA INDEX NAME)

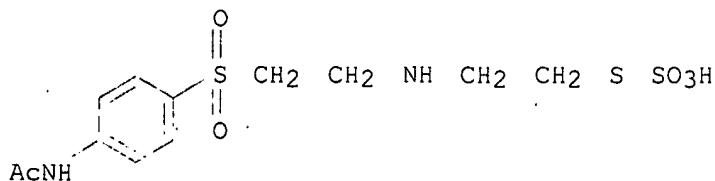
OTHER CA INDEX NAMES:

CN Acetanilide, 4'-[[2-[(2-mercaptoethyl)amino]ethyl]sulfonyl]-, hydrogen sulfate (7CI)

FS 3D CONCORD

MF C12 H18 N2 O6 S3

LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS
 (*File contains numerically searchable property data)



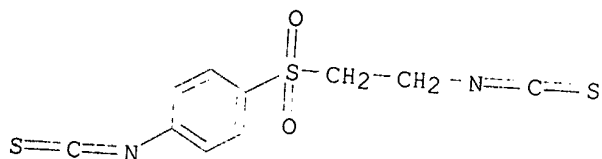
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1957 TO DATE)
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 64:67255

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RN 1021-56-3 REGISTRY
 CN Benzene, 1-isothiocyanato-4-[(2-isothiocyanatoethyl)sulfonyl]- (9CI) (CA
 INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Isothiocyanic acid, diester with 2-[(p-hydroxyphenyl)sulfonyl]ethanol
 (7CI)
 OTHER NAMES:
 CN p-[(2-Isothiocyanatoethyl)sulfonyl]phenyl isothiocyanate
 FS 3D CONCORD
 MF C10 H8 N2 O2 S3
 CI COM
 LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, TOXCENTER
 (*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1957 TO DATE)
 5 REFERENCES IN FILE CAPLUS (1957 TO DATE)
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 94:76568
 REFERENCE 2: 83:191975
 REFERENCE 3: 81:37388
 REFERENCE 4: 78:83960
 REFERENCE 5: 62:29534